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ANNUAL REPORTS
OF THE
Navy Department

FOR THE FISCAL YEAR

1910



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ANNUAL REPORT
OF THE
SECRETARY OF THE NAVY

NAVY DEPARTMENT,
Washington, November 30, 1910.

SIR: I have the honor to submit herewith the annual report of this department. The detailed operations and work of the different bureaus are not included in my report and may be found in the separate reports of the chiefs of the bureaus.

NAVY DEPARTMENT ORGANIZATION.

In my last annual report your attention was not invited to the fact that the Navy Department organization, which you approved and which was put into effect on the 1st of December last, was, to a certain extent, the outcome of the final report of the commission on naval reorganization headed by Mr. Justice Moody, which report was submitted to the President on February 26, 1909. It is true that there are differences between the report of this commission and the organization which was adopted, but the general plan of Navy Department organization and the provision for the duties of the assistant secretary and the divisions of Naval Operations, Personnel, Inspection, and Material are the same. It is proper that this fact should be generally recognized, as well as the fact that the report of this commission has formed the basis of the changes made.

RESULTS OF PRESENT ORGANIZATION.

The present organization of the Navy Department (or so much as concerns the aids), which aimed to place at the disposition of the Secretary expert knowledge and information in order that he might keep in touch with what was going on, has now been in operation practically a year. In consequence, the business of the department has been expedited and the Secretary is, without question, better informed on the workings of the department than has been possible under any previous system.

It may be recalled that my last annual report explained the grouping of the different bureaus of the Navy Department into divisions and the appointment of four aids, who were to keep informed as to the working of each division and supply the Secretary with the necessary expert advice on the duties coming under those divisions.

The aids have not had during the past year any executive authority and have not signed orders to the fleet nor to the bureaus of the Navy Department. No statutory change in the department has been made, except the provision in the last appropriation bill for temporarily abolishing the Bureau of Equipment for one year, and the consolidation of store accounts for two years in the deficiency bill, both taking effect July 1, 1910.

WORK OF THE AIDS.

The work accomplished and the improvements resulting from the advice of the aids has been exceedingly gratifying.

The aid for operations, Rear-Admiral Wainwright, has worked out a reorganization of the battle-ship fleet and the torpedo vessels which has brought about markedly greater efficiency. It has also produced a more even amount of repair work at navy-yards. This is of importance as a greater economy ensues and it keeps a more uniform number of good workmen employed. The work of the General Board, War College, and Office of Naval Intelligence has been better coordinated, so that our war plans and strategic studies are up to date. On account of the aid for operations being a member of the General Board, the military advice and recommendations from the General Board and the fleet have been reconciled with the necessary limitations made by the technical bureaus.

The aid for material, Captain Fletcher, has been of most assistance and value in scrutinizing requests for repairs on vessels with a view to determining whether the final military value will justify the expenditure. Where such repairs are of an extended nature, the subject is taken up with the General Board and the Division of Inspections to determine the necessity or advisability from a military point of view. There can be no doubt that this method is preventing useless and unwarranted expenditures which have been made in the past.

The machinery provided by the present organization seems wholly to overcome and prevent the criticisms directed against the old board on construction, which, composed of bureau chiefs, passed on repairs, and on the designs of vessels prepared by themselves. As the board met infrequently and its members were busy with their bureau duties, delays resulted. Repairs to vessels were recommended which are now seen to have been without good reason. The question of what military value would result after repairs were made was too little considered, as the table herein showing repairs to the older vessels of the navy will demonstrate. The designs of our vessels were, under this system, subject justly to criticism because the ideas of the sea-going officers were not fully considered.

As an illustration of how business has been expedited under the present organization, the following is interesting: The design of

new ships has been a fruitful source of dissension in the past, often resulting in long delays amounting to a year or more before final plans were approved or the actual work of construction begun. In the case of battleships Nos. 34 and 35, appropriated for by the present Congress last June, preliminary designs were presented for the department's consideration by the Bureau of Construction and Repair on April 18, 1910. The General Board, strengthened by military critics called from the battle-ship fleet, and other specialists, subjected these plans to critical discussion, thus giving seagoing officers ample opportunity to present the result of their knowledge and seagoing experience. The plans, with this comment and criticism, were sent back to the department on May 25. These criticisms were referred to the technical bureaus concerned. The diverging opinions were reconciled and the final corrected plan received the Secretary's approval June 10, 1910. The differences of opinion upon these plans that existed between the various authorities, both technical and military, were never before so quickly and satisfactorily adjusted, and the department had the satisfaction of approving the final plans of two great battle ships in record time and nearly two weeks before the appropriation for their construction became available.

The aid for inspection, Admiral Ward, has been of material assistance in expediting the necessary repair work on ships and in advising what older vessels should not be further repaired, and also in overcoming the tendency to spend too much money in modernizing vessels of little military value.

The duties of the aid for personnel, Rear-Admiral Potter, consisted in recommendations on the subject of details of officers of the higher grades, matters concerning the enlisted men of the navy, those affecting the Naval Academy, matters of discipline and legislation affecting the personnel, and of matters pertaining to the naval militia.

Personal conferences on these subjects, and on the other work of the aids, has resulted in a decrease in official correspondence.

AIDS SIGN DETAIL INSTRUCTIONS.

In order to increase the scope of usefulness of the aids, it seems advisable to direct the aids to sign "by direction of the Secretary," detail orders for which general orders have already been signed by the Secretary. In the past year I have signed personally a large amount of mail, including indorsements comparatively unimportant. I purpose in the future, with your approval, to sign the general and important orders for the various business transactions and to direct the aids to transmit my instructions in detail to the different component parts of the department, signing "by direction of the Secretary." This will not give the aids any separate executive authority

or discretion, but will make it possible for them to attend to the details of each transaction for which general orders have already been signed.

As the usefulness of the aids has been so thoroughly demonstrated, it is proper to go even further, and it is recommended that the position of the aids be established by appropriate legislation, so that the organization would be a permanent one. Such legislation should provide for the detail for not more than four years as aids of officers not below the rank of captain, such officers to have the rank and pay of rear-admiral while serving as such aids. Confirmation by the Senate is not advisable, as it may be desirable to detail them to sea duty.

I am fully conscious of the criticism that the aids might build up bureaus about themselves, but this can be dealt with by recommending legislation in detail to prevent it. The aids, when established by legislation, should have authority to call for information from the bureaus in their division and to issue orders in detail in matters on which the general written instructions of the Secretary have already been given.

NAVY-YARD ORGANIZATION.

During the past year I have inspected all of our continental navy-yards, both on the Atlantic and Pacific coast, and have also visited and inspected the naval station at Guantanamo, in Cuba.

Judging from personal observation, from reports from the navy-yards and from the Division of Inspections, the present organization at navy-yards has made for economy and efficiency, and a steady improvement has been made and may be expected to continue in these respects. Some differences exist at navy-yards owing to local differences in positions of shops and other considerations, but after allowing a reasonable time for the different navy-yards to get settled down to the new plan of organization, with the two principal divisions, hull and machinery, conferences or meetings of the commandants were directed to discuss the details of administration at the different navy-yards and to reconcile, as far as might be consistent, differences in administration. These conferences have been of great value, and brought to the front the good ideas and methods at different yards and enabled their being put into effect at all the yards. The main principles of the organization have not been changed, but it is understood that improvement in every direction must be sought and may be expected.

In some yards the principle of consolidation by combining draftsmen and clerical force together, and having a common administrative office, has been in operation. The draftsmen are thus under a common expert head and are assigned to the heads of hull and machinery division and the civil engineer as required, and with due regard to

their special knowledge. This reduces high-priced supervision and keeps the men more constantly employed. The same principle holds with the stenographers and typewriters. If further trial demonstrates the success of this plan, it will be adopted for all yards.

I have decided to make a minor change in the public works of navy-yards by placing the civil engineer's department directly under the commandant and no longer under the captain of the yard.

ECONOMIES IN THE NAVAL ESTABLISHMENT.

The Navy Department's estimates for the expense of the naval establishment for the next fiscal year show a saving of about \$5,000,000, as compared with the amounts appropriated last year.

Competition in the fleet has been encouraged and has resulted in increased efficiency in target practice, economy in coal consumption, and economy in the consumption of supplies.

A reorganization of the battle fleet has been effected so that the ships of the division will visit the home yards in rotation. Each yard will thus usually have one battle ship under repair, resulting in a more uniform distribution of work throughout the year. This will insure a more permanent organization, better workmen, and greater economy. The ordinary small repairs on vessels are now performed by the ships' crews, as far as practicable. Officers are encouraged to improve the self-maintenance and economical operation of their ships.

Ships of the navy are also placed in competition to see which can be the most economical in the use of supplies. This has resulted in a reduction in supplies used of about 20 per cent, and it is expected in this fiscal year that, in proportion to the service performed, there will be a saving of about \$1,500,000.

There has been an increase in the sea-keeping ability of the fleet amounting to 15 per cent. The average speed of the fleet has improved perhaps 5 per cent. The average cruising speed of the fleet has increased about 20 per cent.

One of the largest expenditures of government funds under the Navy Department in the past has probably been that due to repairs made upon vessels of little or no military value when the repairs were completed. During the past year these repairs have been kept down to a minimum and some vessels have been struck from the navy list and disposed of. Not only is a saving effected by reducing the amount spent for repairs, but by getting rid of these useless vessels the cost of maintenance of the navy is reduced.

A table, prepared by the Paymaster-General of the Navy, is inserted here, which shows the large sums expended in the past on repairs for naval vessels.

Statement showing date of first commission, original cost of hull and machinery, and total repairs to June 30, 1910, of vessels completed prior to 1902.

Vessels.	Date of first commission.	Cost of hull and machinery, including armor.	Total cost of repairs to June 30, 1910.
<i>First-class battle ships.</i>			
Alabama	Oct. 16, 1900	\$4,077,010.09	\$579,246.83
Illinois	Sept. 16, 1901	4,073,429.26	428,067.37
Indiana	Nov. 20, 1895	5,533,708.65	2,019,022.07
Iowa	June 16, 1897	5,162,687.12	1,482,228.98
Kearsarge	Feb. 20, 1890	4,429,890.69	537,634.79
Kentucky	May 15, 1899	4,418,094.99	596,515.97
Massachusetts	June 10, 1896	5,401,844.97	1,898,661.04
Oregon	July 15, 1896	5,914,021.90	1,258,114.38
Wisconsin	Feb. 4, 1901	4,162,617.53	813,806.68
<i>Second-class battle ship.</i>			
Texas	Aug. 15, 1895	3,638,284.99	722,719.24
<i>Armored cruisers.</i>			
Brooklyn	Dec. 1, 1896	3,944,820.73	707,068.86
New York	Aug. 1, 1893	3,897,840.32	2,088,372.22
<i>Single-turret monitors.</i>			
Cheyenne	Dec. 8, 1902	1,372,098.16	209,044.59
Ozark	Oct. 28, 1902	1,413,962.99	139,416.72
Tallahassee	June 18, 1903	1,307,130.91	98,984.77
Tonopah	Mar. 6, 1903	1,896,488.61	127,401.31
<i>Double-turret monitors.</i>			
Amphitrite	Apr. 23, 1895	1,951,868.17	400,177.75
Miantonomoh	Oct. 27, 1891	2,241,418.64	250,823.35
Monadnock	Feb. 20, 1896	2,549,170.70	218,717.21
Monterey	Feb. 13, 1893	2,301,104.75	510,988.28
Puritan	Dec. 10, 1896	3,056,278.53	252,945.74
Terror	Apr. 15, 1896	2,018,759.25	298,428.59
<i>Protected cruisers.</i>			
Albany	May 29, 1900	1,205,000.00	476,972.80
Atlanta	July 19, 1888	829,800.00	875,861.11
Baltimore	Jan. 7, 1890	1,554,483.94	1,522,789.08
Boston	May 2, 1887	700,000.00	990,618.27
Chicago	Apr. 17, 1889	1,183,629.21	1,900,988.72
Cincinnati	June 16, 1894	2,023,326.91	1,131,605.29
Columbia	Apr. 23, 1894	3,461,960.26	594,444.90
Minneapolis	Dec. 13, 1894	3,403,707.07	631,769.27
Newark	Feb. 2, 1891	1,439,382.20	953,134.64
New Orleans	Mar. 18, 1898	1,429,215.00	552,175.05
Olympia	Feb. 5, 1895	2,484,027.54	920,522.93
Raleigh	Apr. 17, 1894	1,867,934.32	1,098,678.22
San Francisco	Nov. 15, 1890	1,738,257.82	1,151,767.12
<i>Unprotected cruisers.</i>			
Detroit	July 20, 1893	1,004,711.65	444,544.55
Marblehead	Apr. 2, 1894	1,061,426.30	693,910.29
Montgomery	June 21, 1894	1,050,933.54	749,146.67
<i>Gunboats.</i>			
Castine	Oct. 22, 1894	510,878.13	494,168.62
Concord	Feb. 14, 1891	566,356.91	551,335.80
Machias	July 20, 1893	492,502.32	452,474.86
Petrel	Dec. 10, 1889	309,981.65	346,492.54
Yorktown	Apr. 23, 1889	548,906.61	633,647.00
Helena	July 8, 1897	490,693.05	307,373.53
Nashville	Aug. 19, 1897	476,722.06	374,741.03
Wilmington	May 13, 1897	424,868.65	279,645.08
Annapolis	July 20, 1897	278,131.52	270,663.04
Marietta	Sept. 1, 1897	260,672.02	320,750.21
Newport	Oct. 6, 1897	298,616.14	182,623.05
Princeton	May 27, 1898	313,176.68	240,451.57
Vicksburg	Oct. 23, 1897	286,050.92	247,208.54
Wheeling	Aug. 10, 1897	256,069.19	248,770.46
<i>Training ship.</i>			
Severn	Dec. 3, 1899	357,461.96	47,735.44
Total			35,075,391.07

ENGINEERING COMPETITIONS.

The inauguration of the steaming competitions awakened a lively interest in engineering matters throughout the service. This interest has brought about increased efficiency and economy of expenditure. During the fiscal year ending June 30, 1910, the horsepower of the machinery of the fleet has been increased 16 per cent and the average cruising speed has been increased about 15 per cent, yet the total cost of fuel used on vessels of the navy has decreased over \$2,000,000.

The coal consumption during the second half of the fiscal year was materially less than that for the first half, though more cruising was done in the second half.

The improvement in economy of operation of the fleet is continuing and may be attributed to the general realization of the importance of engineering matters throughout the navy, the most potent cause of improvement being due to the system of engineering competitions instituted within the last year.

GENERAL STOREKEEPING SYSTEM ON SHIPS.

On October 1, 1910, a system of general storekeeping was inaugurated in all vessels of the navy, providing for the consolidation of the stores and storerooms and the substitution of a money allotment for supplies for each ship's department in lieu of an allowance by quantities, such as previously obtained, the quarterly expenditures by the several departments of all vessels of the same class to be published in comparison for the information of the service.

Under this system charges for supplies will be made against the various appropriations only as consumed instead of when placed on board, as formerly.

It is expected that great economies will be effected by the competitive system above referred to, as well as by the consolidation of stores and storerooms, and from the simplification of accounts and returns made possible by the new system.

Economies will undoubtedly result from the new cost-accounting system due to the following:

The time of employees is kept most accurately, care being taken to see that the proper jobs are charged with the actual time expended on them.

Saving will result in shop management due to the fact that the expenses of each shop are uniformly classified. These charges are reported to the heads of divisions very soon after the end of each month, thus permitting a careful investigation of the excess charges and giving the officer or foreman in charge of the shop a chance to cut down his expenditures in the succeeding month.

A further saving will be made owing to the fact that the cost of certain manufactured standard articles, such as coal bags, hammocks, clothes bags, boats, buckets, etc., can be compared for different yards. This will permit of the awarding of the work to the yard doing it the cheapest.

The greatest advantage of the cost accounting system will not be fully realized until the system has been in operation for a sufficient time to enable comparisons to be intelligently made. The system will eventually locate all sources of waste or extravagance, after which elimination will be easy.

Since the navy exists for the purpose of the fighting fleet, it is believed that the best manner in which the efficiency and economy of the naval establishment can be shown, is by a statement of the labor and material expended for the construction, repair, and supplies of the fleet, as represented by its ships in commission.

A substantial decrease in the actual average cost of maintenance per ship in commission will be observed for 1910, viz, a decrease of nearly \$20,000 for each ship. Applying this ratio to all ships in commission, the relative decrease of 1910 over 1909, or, to put the matter in another way, the gain in efficiency of 1910 over 1909, is \$3,998,136.58. A tabulated statement is attached illustrating this point.

	1907.	1908.	1909.	1910.*
Expenditures for labor and material ashore and for stores afloat.....	\$25,655,920.96	\$32,870,434.19	\$34,376,250.84	\$33,184,338.82
Ships in commission.....	162	181	196	212
Tonnage of ships.....	617,967	679,649	657,018	789,881
Average cost of the naval establishment per ship.....	\$158,369.88	\$181,604.60	\$175,389.03	\$156,529.90
Relative increase in expenditures or loss in efficiency of 1908 over 1907.....		\$4,205,486.70		
Relative decrease in expenditures or gain in efficiency of 1909 over 1908.....			\$1,218,252.48	
Relative decrease in expenditures or gain in efficiency of 1910 over 1909.....				\$3,998,136.58

* Reorganization in effect Dec. 1, 1909.

COST ACCOUNTING.

During the fiscal year 1910 the firm of Marwick, Mitchell & Co. has been employed in devising and installing a cost-accounting system for the navy. Early in July, 1909, they began studying the conditions at the navy-yard, Boston, Mass. The first step was to design forms for the keeping of the cost records. Many difficulties were encountered, owing to the great number of appropriations involved and the totally different conditions existing in the navy as compared with commercial concerns.

In September, 1909, a central accounting office was established, with an officer of the Pay Corps in charge. This office was under the immediate direction of the commandant. The firm of civilian

experts was steadily employed on the work at this navy-yard until the latter part of January. Early in January, 1910, officers of the Pay Corps were detailed for duty as accounting officers at the navy-yards, Philadelphia, Pa., and Norfolk, Va., although the new system of accounting was not put in operation at this time at these yards.

The central accounting office was established at the Brooklyn Navy-Yard, with an officer of the Pay Corps in charge during the latter part of February, 1910.

During the latter part of March, 1910, the firm of experts was withdrawn from the work of installing the accounting system for the purpose of making an examination of the system in the Bureau of Supplies and Accounts and other work under the direction of the Secretary of the Navy.

The decision of the Attorney-General in regard to the Naval Supply Fund caused certain modifications to be made in the details of the cost accounting, and new instructions embodying these changes, and to comply with the provisions of the naval appropriation bill for the fiscal year beginning July 1, 1910, were prepared under date of June 25, 1910, and went into effect on July 1, 1910, at the industrial navy-yards within the limits of the United States, and at Cavite and Olongapo, P. I., on September 1, 1910.

A uniform report, to be submitted by each accounting officer monthly, showing the expenditures at a navy-yard for labor, indirect, and material, was instituted. Since July 1, 1910, the system of cost accounting, as installed at the navy-yard, Boston, Mass., has been extended to the following navy-yards: Portsmouth, N. H.; New York, N. Y.; Philadelphia, Pa.; Norfolk, Va.; Charleston, S. C.; Mare Island, Cal.; Puget Sound, Wash.

The same experts have been employed on the work of instructing accounting officers, opening books of accounts, foundry-operating accounts, and the introduction of forms. This work will be completed early in December.

Books of accounts have been opened at each accounting office. These books show all the transactions during the month and are balanced at the end of each month.

NAVAL SUPPLY FUND.

The naval supply fund was authorized and established for the purchase of ordinary commercial supplies for the naval service by the naval appropriation act approved March 3, 1893, in the following language:

And the Secretary of the Treasury is hereby authorized and directed to cause the general account of advances to be charged with the sum of two hundred thousand dollars, which amount shall be carried to the credit of a permanent naval supply fund to be used under the direction of the Secretary

of the Navy in the purchase of ordinary commercial supplies for the naval service, and to be reimbursed from the proper naval appropriations whenever the supplies purchased under said fund are issued for use.

The naval supply fund thus established was still further increased by Congress, as set forth below:

June 10, 1896 (naval appropriation act)-----	\$300,000
March 3, 1897 (naval appropriation act)-----	1,000,000
January 5, 1899 (urgent deficiency act)-----	1,000,000
February 14, 1902 (urgent deficiency act)-----	200,000
Total increase-----	2,500,000
Amount originally authorized (March 3, 1893)-----	200,000
Total amount authorized-----	2,700,000

No further increases have been made to the fund, although in 1903 recommendations were submitted to Congress to further increase the fund to \$4,000,000 and in 1904 to \$5,000,000.

In February, 1910, the rapid increase in the value of the naval supply fund attracted my attention. The value of the fund was shown by the Paymaster-General's reports to be—

June 30, 1907-----	\$2,700,000.00
June 30, 1908-----	9,423,602.79
June 30, 1909-----	11,718,713.80
December 31, 1909-----	12,760,748.46

The main reason for the extraordinary increase in the value of the fund was due to the action taken in 1907, whereby stores which by law became common general stock at the end of a fiscal year, and when issued during subsequent fiscal years should have been issued without charge to the current appropriations of the bureaus using them, were incorporated into the naval supply fund stores. When drawn for use their value was reimbursed to the fund from the appropriations of the bureaus drawing them. This procedure had been recommended by the Paymaster-General in May, 1907, and was approved by the Acting Secretary of the Navy on May 18, 1907, after having been considered by the Judge-Advocate-General of the Navy, who gave an opinion that the transfer of the "common general stock" to the naval supply fund was not in conflict with the laws creating and increasing that fund.

Doubting the legality of this action in increasing the fund beyond the limit of \$2,700,000, and also certain features of its administration or use, I submitted the question to the Attorney-General of the United States, and on February 28, 1910, he rendered an opinion "that the increase of the permanent naval supply fund beyond the statutory limit of \$2,700,000, described in your communication, was without warrant of law."

It had been foreseen that an opinion declaring illegal the augmented naval supply fund would result in considerable temporary confusion in storekeeping administration and cost accounting, and would confront the department with the solution of a complex and vexatious problem.

NAVAL SUPPLY ACCOUNT.

As a remedy for the unsatisfactory methods of purchasing, carrying, and accounting for stores under the various bureau appropriations, the department submitted recommendations to Congress which resulted in the following legislation (deficiency act approved June 25, 1910):

Naval supply account for the naval establishment: All stores on hand July first, nineteen hundred and ten, shall be charged to a naval supply account on the records of the Bureau of Supplies and Accounts, and all purchases of stock or expenditures for manufactured or repaired articles for stock at navy-yards or stations during the fiscal years nineteen hundred and eleven and nineteen hundred and twelve shall be charged to this account and be paid for from "general account of advances."

The amount so advanced during the fiscal years nineteen hundred and eleven and nineteen hundred and twelve shall be charged to the proper appropriations as these stores are consumed from stock, and when disbursements made for all other purposes are accomplished the amount so charged shall be returned to "general account of advances" by pay or counter warrants: *Provided, however,* That such material as provisions, clothing, and small stores, medical stores, and such other materials as the Secretary of the Navy may designate may be purchased by specific appropriations or transferred to specific appropriations before such materials are issued for use or consumption. The said charge, however, to any particular appropriation shall be limited to the amount appropriated therefor.

Credit shall be made to appropriations during said fiscal years nineteen hundred and eleven and nineteen hundred and twelve for the value of surveyed material taken from repairs made to ships or plant at navy-yards and stations or for stores turned in from ships, and this credit shall not be used by the bureaus to increase the amount of that appropriation, but shall be a deduction from the operating expenses of the annual appropriation concerned, subject to the same provision as stated in above paragraph.

NAVAL SUPPLY ACCOUNT DIFFERS FROM NAVAL SUPPLY FUND.

The naval supply fund, which was first authorized March 3, 1893, for the purchase of ordinary commercial supplies for the naval service, differs materially from the naval supply account, approved June 25, 1910, inasmuch as with the naval supply fund there existed seven different store accounts. But with the establishment of the naval supply account the seven store accounts of the Navy Department were consolidated into one property store account, known as the "naval supply account." The advantages gained thereby are fully described below.

ADVANTAGES TO FOLLOW THE ESTABLISHMENT OF A NAVAL
SUPPLY ACCOUNT

The law enacting this account entirely separates the accounting for stores, their purchase, receipt, and custody, from the naval appropriations. All stores of the naval establishment (excepting those for provisions, clothing and small stores, medical stores, and ordnance stores, which include stores purchased under "Increase of the navy, armor and armament"), all purchases, whether under contract or otherwise, all adjustments of stores under survey, and all suspension accounts in connection with the manufacture of material for stock and to be drawn upon for the naval service will be carried under this account and not directly against the naval appropriations, as heretofore.

This store account being so separated from the appropriations accounts, a balance sheet showing the various current expenses of the naval establishment can be taken off at any time and will show the actual state of the appropriations, giving the available balances under them. Such a statement of available balances is not possible where the store accounts and the unadjusted balances and transfers in connection with stores form a part of the account of the appropriation expenditures, as has heretofore been the case.

This law establishes one capital account in which all stores are carried. It therefore shows the total investment of naval funds in stores.

As compared with this plan, the naval supply fund was associated with several other accounts, each of which, as well as the naval supply fund, carried stores of its own. These included stores purchased under all of the naval appropriations, such as "Construction and repair," "Steam machinery," "Equipment of vessels," "Ordnance and ordnance stores," "Maintenance, yards and docks," and in addition to these regular appropriations there were special ones, like various appropriations for "Public works" and those for the "Increase of the navy." In the case of the annual appropriations, stores on hand at the close of the fiscal year in which they were purchased usually became "common general stock," the issue of which, under the law, was made without reimbursement. The existing law as to the naval supply fund provided no method by which stores returned from ships placed out of commission, or returned from ships for any other reason, and available for use again, could be taken up on the books and credited to the appropriations which had paid for them. The result of this situation was that when turned over to the naval supply fund, as has been the recent practice, stores, upon being re-issued, were paid for a second time, although already paid for when purchased. This caused an improper charge and the bookkeeping

account of expenses for the administration of the navy was incorrect, indicating larger costs for the maintenance of the service than were actually incurred. The establishment of the naval supply account, while avoiding such a practice, yet provides a means by which such stores are carried by it until actually used.

When the naval supply fund was used as a transfer or clearing account by which stores were transferred from one appropriation to another, two transfers on paper were necessary.

The naval supply account renders any transfer unnecessary, because stores are drawn only when needed for use, at which time they will be paid for by the proper appropriation. The provision by which stores are only paid for when drawn for use and the carrying of stores under the naval supply account on board ship separates the custody of stores absolutely from the appropriation. Heretofore, the cost of maintenance of the navy, as stated in the balance sheets, was a gross cost made up of the actual cost and the value of stores purchased during that year and not drawn for issue. A further source of embarrassment and error was the consumption of stores on hand, whose value was not charged when consumed because of the law governing "common general stock," which provides that it shall be issued without reimbursement.

The establishment of the naval supply account will provide Congress with the net cost of maintaining the naval establishment in a form which its committees can readily understand and which they can use in digesting and discussing the estimates submitted for the ensuing year. The information furnished them in connection with the estimates will include the net costs of the naval establishment for the previous year, the store account showing the total stores on hand under the various titles, and giving easily, by comparative statement, the way in which those stores have fluctuated during the years under discussion.

It is provided that credit shall be made to appropriations in each fiscal year for the value of salvage material taken from repairs made to ships or plant at navy-yards and stations or for stores returned from ships. These credits to appropriations must be covered into the Treasury as unexpended balances at the end of the fiscal year, because there are stores on hand representing that value. This procedure reduces the net cost of maintenance for the year and prevents the accumulation of stores by further purchases, because the money otherwise available must by this law be turned into the Treasury.

The naval supply account provides also against mixing of accounts for stores on hand, carried for use in the fleet, with the actual cost of the fleet's maintenance, because these stores form a part of the capital account and are not charged against and paid for by appropriations

until actually used. This usage was not possible with the naval supply fund.

With the improved accounting methods which will prevail under this act fewer stores will be carried, for two reasons: First, because there is a better knowledge of the stores on hand, of the value of the accounts issued, and of the ordinary service requirements for stores of different kinds; and, second, because all stores of one kind will be carried in one group instead of being in several groups as was necessary, in order to hold them under the appropriations which pay for them. Under these conditions amounts purchased can be governed by experience in the amounts used. Heretofore no means have existed by which the amount used could be readily determined, because many stores after once leaving the storehouse were not of record in such a way that the actual amounts used could be determined. The resulting reduction of stock, because of the single store account, will, as a consequence, lessen the space necessary for its storage in navy-yards, and will to a certain extent release buildings for other purposes. The operating expenses in connection with the care, custody, and handling of stores should, because of these changes, be reduced, and the clerical force will accomplish the same results attained under the old system with less work by reducing the number of accounts under which stores are carried.

The total value of stores on hand at Portsmouth, Boston, New York, Philadelphia, Norfolk, Charleston, Mare Island, and Puget Sound on September 30, 1910, was \$52,368,852.10.

Instructions have been given to reduce the amount of money tied up in stores, and a conference of general storekeepers has been held to discuss methods of accomplishing this result.

The establishment of the property account, a single account, has materially aided in this effort, and I am informed by the Paymaster-General that the net decrease of stores on hand for the three months ending September 30, 1910, was \$2,625,962.76 at the eight yards above mentioned.

NAVAL SUPPLY FUND LIQUIDATION.

On March 31, 1910, the naval supply fund stood over-obligated \$3,342,582.64, due to outstanding contracts, \$2,653,777.43, and an indicated overdraft of \$688,805.21, if the fund had been liquidated March 31.

During the period from March 31 to November 19 stores were transferred to the extent of \$6,042,582.64; that is, were charged, as used, to the various appropriations. In other words, the over-obligation of \$3,342,582.64 was met, and, in addition, the entire value of the naval supply fund (\$2,700,000) which was not available March 31, 1910, is now in the Treasury to the credit of that fund,

NAVAL SUPPLY ACCOUNT—NAVAL SUPPLY FUND LEGISLATION.

The advantages of the naval supply account are so clear in reducing the number of stores and placing them under a single account that I recommend that it be made permanent by law, and that Congress authorize the transfer of the \$2,700,000 naval supply fund from the credit of the fund to be covered into the Treasury.

ESTIMATES.

A comparative statement of appropriations and estimates for the fiscal years 1911 and 1912 is contained in the Appendix.

The estimates for the fiscal year 1912, as originally submitted by the several bureaus, were carefully revised and reduced and, as finally submitted to Congress, their total was about \$5,000,000 less than the amount appropriated for the fiscal year 1911.

In the case of public works at practically all of the navy-yards and naval stations, the department did not reach a decision as to the absolutely essential items until after a personal inspection of the yards and their needs by the Secretary.

A personal acquaintance with the needs of the navy-yards and examination of the estimates submitted to me for consideration this year has convinced me that a change must be made in submitting estimates.

The estimates submitted for public works at navy-yards and stations amounted to \$28,621,530.37, and the amount approved and sent in by me was \$8,135,827.

It is evident from this that projects requiring large appropriations should be sent in during the year, be explained and scrutinized separately, and that the annual estimates of the bureaus should not be submitted as a whole until the separate large items are approved.

Some such change as this, or the restriction of the bureaus to a fixed sum for all purposes, is evidently necessary.

DEPARTMENT BUSINESS METHODS.

By your order the department appointed a board on business methods and economy in the Navy Department to work in conjunction with the civilian expert employed by you and with the committees appointed in the other departments. Some progress had already been made in the past year in reducing paper work and indorsements and in effecting economies in routine administration. It is possible now to see that this board will be able to accomplish substantial improvements in cutting out useless routine reports and returns and in putting the work of the various bureaus and offices on a basis more in accord with modern commercial practice.

THE CRUISING FLEETS.

ATLANTIC FLEET.

The Atlantic Fleet, under the command of Rear-Admiral Seaton Schroeder, U. S. Navy, has spent the year in such exercises and cruising as seemed best calculated to keep it in efficient condition, including cruising in the West Indies during the winter. It is now on a cruise in European waters and will go to Guantanamo for the winter's exercises about the first of the year.

PACIFIC FLEET.

The Pacific Fleet, under the command of Rear-Admiral Giles B. Harber, U. S. Navy, in addition to the usual drills and exercises, during the year made a cruise to Honolulu, Manila, China, and Japan, and returned to the west coast of the United States. The vessels of this fleet having been in service a considerable number of years were in need of general overhauling.

ASIATIC FLEET.

For strategic and administrative reasons the department has reestablished the Asiatic Fleet, and the ships employed in Asiatic waters and formerly forming a part of the Pacific Fleet have been constituted a separate fleet, under the command of Rear-Admiral John Hubbard, U. S. Navy, as commander in chief. These vessels have continued their service in protecting American interests in the Orient.

SPECIAL SERVICE SQUADRON.

In response to an invitation from the Government of Argentina, a special service squadron consisting of the armored cruisers *Tennessee*, *Montana*, *North Carolina*, and *South Dakota*, and the scout cruiser *Chester*, was organized under the command of Rear-Admiral Sidney A. Staunton, U. S. Navy, as commander in chief, and attended the ceremonies in that country in connection with the centennial celebration of independence.

WEST INDIAN WATERS.

A number of smaller vessels have been actively employed since December in protecting American interests in tropical American waters, especially on both coasts of Nicaragua. In connection with this service a force of marines was embarked on board the U. S. S. *Buffalo* and held at Corinto ready to land should circumstances require it. To protect American interests in Greytown and Blue-

fields during the Nicaraguan revolution, the naval officers notified both parties that hostilities would not be allowed to take place in either city, and men of the navy and marines were landed at Bluefields in June to insure compliance with this order.

TORPEDO FLEETS.

A new organization of the torpedo vessels of the navy, including submarines, has been put into effect with marked benefit to the service. This groups all such vessels in commission in the Atlantic into the Atlantic Torpedo Fleet, under the command of a single officer experienced in this class of work. The Pacific and Asiatic torpedo fleets have been similarly constituted in those waters.

LIBERIAN WATERS.

There having been serious troubles with the natives in Liberia, the department has kept vessels on the Liberian coast as deemed necessary to protect American interests and carry out the obligations imposed upon us by our treaty with that country.

MOVEMENTS OF INDIVIDUAL VESSELS.

The movements of all the vessels of the navy during the year are given in an appendix.

REORGANIZATION OF THE FLEET.

The department has effected a reorganization of the Atlantic Fleet with a view to increasing the efficiency of the fleet, promoting economy in repairs, and so regulating the repair periods that the amount of work at the several navy-yards will be practically uniform throughout the year. By July, 1911, this fleet will contain 21 battle ships and 4 armored cruisers, instead of 16 battle ships, its present strength. The battle ships will be grouped in four divisions of 5 ships each, the twenty-first ship, bearing the flag of the commander in chief, being independent of any division. Each division of 5 ships will be based at a division home yard. Four ships of each division will always be available for active service, while the fifth ship will be at the home port for overhauling and repairs. The ships of the division will visit its home yard in rotation for repair periods of about two months each. Thus, 17 ships will be continually available for active operation, while each of the four principal navy-yards will almost continuously have one battle ship under repair, which will result in a practically uniform amount of work and will do much toward maintaining a constant working force at each yard.

In connection with this reorganization, division commanders have been charged with increased responsibility for the efficiency and administration of their commands, while the commander in chief has been relieved of many of the details of administration, which measures the department expects will result in the better training of division commanders for the chief command.

While the foregoing plan is wholly applicable only to the Atlantic Fleet, all other vessels of the navy are being assigned to home yards in such a manner as to insure the greatest uniformity and system in repair work at each of the yards.

RESERVE FLEET.

Several of the older battle ships are undergoing more or less extensive overhauling and repairs to fit them for further service. These vessels will be assigned, as soon as completed, to a Reserve Fleet, which will be organized in the latter part of 1910, and which will include all battle ships in the Atlantic not attached to the Atlantic Fleet. This Reserve Fleet will be manned by reduced crews, and will be kept in readiness for any duty as far as the condition of the naval personnel will permit.

COLLIERS AND OTHER AUXILIARIES.

To make the fleet self-sustaining for considerable periods and to maintain it in the highest practicable state of efficiency in the probable circumstances of war, it is essential that it should be provided with suitable repair, supply, and hospital ships. The geographical position of our country is such that the fleet will of necessity operate for long periods far from a home base. The present repair, supply, and hospital ships are converted merchant vessels, which, owing to their age and consequent deterioration, can not be expected to remain serviceable much longer; moreover, these vessels are not adequate to the requirements of peace, much less of war, and should be gradually replaced by means of a construction programme extending over several years.

Among the auxiliaries required must be included vessels to act as tenders to destroyers and submarines, for without such tenders vessels of these two classes are restricted in their operation to the immediate vicinity of their shore base. One tender is required for each group of fifteen destroyers, and one for each division of five submarines.

In addition to the colliers recently built and authorized, at least three, each with a combined cargo and bunker capacity of 12,500 tons, will be required to place the fleet on a war footing.

The building of two seagoing tugs is recommended to replace the *Nina* and *Nezinscot*, which were lost at sea in the past year. It is further recommended that the Secretary be authorized to build these by contract or in such navy-yard as seems advisable. The department is frequently seriously embarrassed for want of vessels of this class, most of those now in service being old or of insufficient power to properly perform the duty required of them.

AVIATION.

November 14 Mr. Eugene Ely made an experiment at Hampton Roads in flying in a Curtiss biplane from the deck of the U. S. S. *Birmingham*, which had been furnished by the department. The object was to demonstrate the possibility of an aeroplane of the existing type leaving a ship for scout purposes. A temporary platform was placed forward on the *Birmingham* for the purpose of assisting the aviator with the ship's speed by steaming ahead to wind. Mr. Ely did not, however, need this help, and easily succeeded in making the flight while the ship was at anchor, thereby increasing the value of the experiment.

This experiment demonstrated the conditions governing the location of future platforms on shipboard for this purpose, and showed that they could be installed without interfering seriously with the other features of the ship.

Landing on or near a ship on returning with information after a scouting trip appears to be practicable.

This experiment and the advances which have been made in aviation seem to demonstrate that it is destined to perform some part in the naval warfare of the future. It appears likely that this will be limited to scouting. A scout which is not strong enough to pierce the enemy's line can get as near as possible and then send an aeroplane 30 or 40 miles, obtain valuable information and then return to the scout. Even if the aviator did not land on the scout he could be brought on board and deliver his information. The loss of an aeroplane would be of no moment, as the ship may easily carry others. The distinct value of service of this kind is easily seen.

The department contemplates further experiments along these lines, with the belief that it will be necessary in the near future to equip all scouts with one or more aeroplanes to increase the distance at which information can be secured.

For the purpose of carrying on such experiments the department recommends that \$25,000 be authorized.

LOCATION OF BATTLE FLEET.

There has been a constant desire on the part of the people of the Pacific coast for the maintenance of the battle fleet on that coast. During my recent visit of inspection on the Pacific coast these views were frequently expressed, and I endeavored to make it clear, in conversation and in speeches at public gatherings, that it was not considered advisable to maintain the battle fleet in the Pacific Ocean, at least not until the Panama Canal is opened. Generally speaking, these views were accepted and acquiesced in.

With the difference in the cost of coal when it is supplied by our own colliers (supposing that sufficient colliers were available) it would cost nearly \$4,000,000 a year more to maintain the fleet in the Pacific than it does to maintain it in the Atlantic Ocean. No suitable coal mined on the Pacific coast is yet available, so that the permanent transfer of the fleet to the Pacific Ocean would call for an increased expenditure of at least the sum mentioned. Should the coal be transported entirely in American bottoms, this cost would be increased at least 25 per cent. In addition to this matter of coal, the cost of navy-yard repairs and of all supplies on the west coast is somewhat greater than on the Atlantic.

The facilities existing on the Pacific coast, particularly as regards docks, are not yet sufficient to maintain a large fleet comprising 16 or more battle ships and the other component parts of a fleet, and will not be for some time to come. On account of these reasons, largely economical, it would appear inadvisable to transfer the fleet to the Pacific, even if there were no other reasons; but it is considered that the place for the fleet, at least until the Panama Canal is completed, is in the Atlantic. Our responsibilities in regard to the Panama Canal will probably properly call for the presence of the fleet in or near the Caribbean Sea, unless some emergency should arise calling for its presence elsewhere.

When the Panama Canal is opened the fleet can pass from one ocean to the other, and it would then, probably, with the increased facilities of the two navy-yards on the Pacific coast, which are advisable, spend different periods of time in each ocean. It would also seem to be practicable for the fleet to make cruises at different times, somewhat after the principle of the battle-ship cruise around the world, and the Pacific Ocean is well adapted for exercises of that character.

SHIPMENTS OF COAL TO THE PACIFIC.

The navy is dependent in the Pacific on coal shipped from the Atlantic coast, owing to the fact that no satisfactory steaming coal has yet been found in the Pacific Coast States. Efforts are now being

made, however, to find such a coal, and the department has begun a series of tests of the most promising Pacific coast coals, which tests will be carried out by an armored cruiser in competition with another vessel burning the standard east coast coal. It is the intention of the department to make these tests exhaustive and to carry them out under such conditions as will definitely settle the question as to the suitability of Pacific coast coal for naval vessels and as to the relative value of this coal as compared with the east coast coals.

Briefly stated, the disadvantages of using west coast coals have, in the past, been found to be their inferior keeping quality in storage, their unsuitability for forced draft, their injurious effect on marine boilers, necessitating undue cost for upkeep and repairs, and their comparatively poor calorific value compared with standard navy coal. By using west coast coal the steaming radius of ships would be decreased about 20 per cent.

During the last three years the average freight rate for coal shipped in American vessels to the Pacific coast was about \$7 per ton. The rate in foreign steamers averaged about \$3.80. The American bids have ranged from \$7 to \$13.50 per ton for shipments in American steamers; but, even at such rates, very few tenders of American bottoms are made. In fact, there are not enough American steamers available to supply our fleet in the Pacific, even at excessive freight rates. At present a differential of 50 per cent is allowed in favor of American ships, and shipments are made in American bottoms whenever they can be obtained at a figure not greater than 50 per cent in excess of rates in foreign bottoms.

FUEL-OIL DEPOTS.

Owing to the increasing use of oil for fuel in the navy, it has become necessary for the department to build fuel-oil depots at several important points on the Atlantic coast, namely, Key West, Charleston, Norfolk, and Narragansett Bay. Similar depots should be built at each of the principal naval bases as soon as the funds therefor become available. All new destroyers and submarines are now designed to use oil exclusively for fuel, while battle ships and other large vessels are being fitted to carry oil as an auxiliary fuel. The navy is now dependent upon commercial oil stations, which are fairly well distributed along the entire continental coast, but the navy must build its own depots at outlying strategic points and naval bases where the commercial supply is lacking or inadequate, and also at places where the navy should have a supply independent of local commercial interests.

HYDROGRAPHIC OFFICE.

Nearly half the charts and more than half the sailing directions supplied to the ships of the navy are publications of the British Admiralty. In time of war it would be extremely difficult to continue the supply of these publications, especially if they should be declared to be contraband. The Hydrographic Office prepares for publication a great number of charts and sailing directions, and it should be increased in personnel and facilities so that it can produce the entire number needed for the fleet. It is, to say the least, inappropriate that we should not ourselves publish all charts and sailing directions needed by our vessels.

The last legislative, executive, and judicial appropriation act prohibited the employment in the Hydrographic Office of more than two naval officers. This has seriously crippled the work of the Hydrographic Office, and, if reenacted, will effectually prevent the Secretary of the Navy from keeping the work of the Hydrographic Office in efficient condition for the use of the fleet.

ENGINEERING.

It is now generally recognized that while the personnel legislation of 1899 abolished the old Engineer Corps as a distinct body, the conditions of service in the navy to-day have made the present line officers compare favorably as operating engineers with the members of the old corps. Almost every part of the line officer's duty of to-day has to do with machinery in some form. He lives in a heavily charged engineering atmosphere, and his duties with ordnance and electrical machinery are as truly engineering duties as are those connected with the propelling machinery. The regular course of instruction of midshipmen at the Naval Academy has been developed along engineering lines until it is to-day superior to that formerly given cadet engineers alone and as a practical course is probably the best given by any engineering school in the country.

While this is true as regards the practical engineering work of the navy, it is recognized that the design of machinery of our vessels requires the services of officers of special technical training, who must give their time and thought to such work if it is to be done to the best advantage. We have in the service, outside of those officers of the old Engineer Corps who are restricted by law to the performance of engineer duty only, a number of engineering experts, and others are being trained to take their places as time goes on. It is the opinion of the department that these experts should have several years' experience at sea and that before qualifying as expert engineers they should have performed for a considerable period the usual duties of subordinate

line officers. This experience is necessary to a clear and broad conception of the needs of the service which must govern all designs of naval vessels and of naval machinery.

It should be clearly understood that, though the Engineer Corps of the navy as a distinct corps has passed, we have a larger body of capable engineer officers in the new line, and engineering in the navy will not suffer for lack of capable hands to which it may be trusted.

In accordance with the foregoing principles, a school for post-graduate work in marine engineering was established pursuant to the orders of the Navy Department, to stimulate general interest in engineering matters throughout the navy and to provide a method for securing competent designing engineers.

The students of the school are limited in number to 20, 10 being selected each year from applicants for that duty below the rank of lieutenant-commander. The basis of selection is professional ability, as evidenced by the records of service of those officers who are candidates for detail to this school. There were considerably more than 200 applicants for detail to the classes now at the school, thus necessitating nice discrimination among officers whose claims to selection were, in many cases, nearly equal.

Evidently where there is a general desire among the younger officers of the navy to improve their engineering knowledge, the establishment of this school, by holding out a reward for proficiency, serves to accomplish one of its principal objects—the stimulation of general interest in engineering matters, with consequent general improvement in naval efficiency.

The headquarters of the School of Marine Engineering is at the Naval Academy, at Annapolis, Md., where facilities are given to the students for original experimental investigation in the three large laboratories at that place—the mechanical engineering laboratory of the Naval Academy, in which most of the mechanical appliances used in any way in the navy are exhibited and in which these appliances may be tested; the electrical engineering laboratory of the Naval Academy, which is, in an electrical way, quite as complete as the mechanical laboratory and which is equally well adapted for tests of actual and experimental apparatus; and the engineering experiment station, in which experiments are regularly conducted on a large scale to determine questions of great interest to naval engineers.

A valuable feature of the course of instruction at Annapolis has been a series of lectures given by some of the most eminent experts in the country. These gentlemen have appeared before the school and have delivered lectures upon engineering subjects chosen usually by themselves. They have in every case been invited to criticise freely naval practices and have been requested to develop as far as

possible any weakness of naval engineering. The student officers have thus come in personal contact with some of the leaders in the engineering profession, and it is hoped that in this way it will be possible to extend the use of successful commercial methods in naval engineering designs and practices. It is encouraging to the department to know of the hearty approval expressed by these distinguished visitors both upon the purpose and operation of the school.

Among the general topics covered by lectures are the following:

Engineering education:

Rear-Admiral George W. Melville, late Engineer in Chief of the United States Navy.

Mr. Walter M. McFarland, of the Babcock & Wilcox Company.

Steam turbines:

Mr. W. L. R. Emmet, of the General Electric Company.

Mr. C. B. Edwards, of the Fore River Shipbuilding Company.

Mr. H. B. Anderson, representing the Parsons Marine Steam Turbine Company.

Electrical engineering:

Prof. A. E. Kennelly, Harvard University.

Mr. J. W. Kellogg, of the General Electric Company.

Commander W. H. G. Bullard, U. S. Navy.

Internal-combustion engines:

Dr. F. R. Hutton, Columbia University.

Mr. Arthur West, of the Bethlehem Steel Company.

Mr. L. Y. Spear, of the Electric Boat Company.

Mr. E. W. Graef, of the Trenton Engine Company.

Practical engineering problems:

Prof. Ira N. Hollis, of Harvard University.

Dr. A. S. Cushman, experimental chemist, the Department of Agriculture.

Mr. Charles D. Mosher, of the Mosher Boiler Company.

Mr. J. S. Leslie, of the Leslie Valve Company.

Mr. E. H. Peabody, of the Babcock & Wilcox Company.

Capt. F. W. Bartlett, U. S. Navy.

Capt. F. H. Bailey, U. S. Navy.

Machinery design:

Mr. Charles P. Wetherbee, of the Bath Iron Works.

Commander C. W. Dyson, U. S. Navy.

Shop management:

Mr. Frederick W. Taylor, past president of the American Society of Mechanical Engineers.

Chief Engineer Charles H. Manning, U. S. Navy, retired, of the Amoskeag Mills.

A valuable educational feature of the course of instruction is provided by arranging that the student officers shall make a summer tour among the representative productive establishments of the country. For the purpose of these visits many of the largest engineering plants in the country have voluntarily tendered the freedom of their shops and plants. At some of these plants, special courses of lectures to the student officers have been arranged by experts at the works. Am-

ple opportunity for observation and study of commercial work and management has been afforded, and the student officers have been enabled to make comparisons that it is hoped may improve the future efficiency and economy of the navy.

From the graduates of the school it is contemplated that two officers shall be selected annually for duty as designing engineers; normally these selections will not be made until the graduate officers have performed at least two years of duty after graduation from the School of Marine Engineering, and, of course, no officer will be selected as a designing engineer until he has definitely fixed his purpose to develop his abilities along naval engineering lines, and not until his performance has clearly demonstrated his special ability as a naval engineer.

The number of officers reserved for designing engineering duty has been limited to 20, of which number 4 have thus far been chosen. These officers are not removed from the line of the navy, nor is their status as officers of the line altered in any way except by the announced intention of the department to detail them at all times for engineering duty, to give them opportunities to further develop their ability in engineering lines, and not to detail them for duty in command of ships at sea. It is not contemplated that these officers shall not be sent to sea; on the contrary, it is proposed that they be in the future detailed for such sea service as is necessary to keep them in close touch with the needs of the fleet. These officers are to be the naval engineering specialists of the future.

The results already obtained give reason to expect that this School of Marine Engineering will successfully supply the needs of the service for a small number of expert designing mechanical and electrical engineers of high ability, and that, in addition, the school will continue to stimulate the interest of the service in engineering matters and that the graduates of the school will disseminate engineering information throughout the fleet.

NAVY-YARDS.

I have lately completed a comprehensive inspection of our Pacific coast naval stations, the Gulf coast stations, and the Guantanamo naval station, in Cuba. Even before making these inspections it was clear that we have many more naval stations and other shore accessories than are sufficient for the purpose which these stations should serve; that is, to keep the fighting fleet in efficient condition.

Navy-yards are primarily for war and only incidentally for peace. They should be establishments for the docking, repair, and refit of war vessels, and not ordinarily for construction. Under modern con-

ditions naval vessels must be constructed in times of peace, as the duration of a war will not allow time for construction. The function of naval stations, therefore, is to maintain in efficiency ships already built; their location being determined by strategic considerations and their number by the actual needs of the fleet.

Our coast frontier naturally divides itself into three sections—the Atlantic, the Gulf, and the Pacific. The number of naval stations retained for the use of the fleet in these three sections should be determined by the above considerations.

The United States has over twice as many first-class home navy-yards as has Great Britain with a navy at least double the size of ours, and we have one more navy-yard of the second class than Great Britain has. In other words, we have in all eleven first and second class navy-yards in the United States, while Great Britain has but six of the same kind. Germany has three and France five. A table is inserted here showing the comparative number of navy-yards in further explanation of this point:

Table showing comparative number of navy-yards in the United States, Great Britain, Germany, and France.

	Home yards.		Yards abroad.	
	First class.	Second class.	First class.	Second class.
United States.....	7	4	1 (building)	2
Great Britain.....	3	3	3	3
Germany.....	2	1	1	0
France.....	4	1	1	2

In order that the cost of maintaining so many naval stations and yards may be readily appreciated, there is inserted here a table showing the total expenditures on the different stations since their establishment. This table, prepared by the Paymaster-General of the Navy, represents money expended on the navy-yards, and not money spent in repairs on vessels. It also shows the yearly cost of maintenance of each yard.

Statement showing date of establishment; original cost of site; expenditures for buildings, public works, and improvements; machinery installed in the various buildings; and cost of maintenance of the several navy-yards and stations to June 30, 1910; also the average yearly cost of maintenance for five years.

Stations.	Date of establishment.	Original cost of site.	Total expenditures for buildings, public works, and improvements, and machinery installed in the various buildings.	Total maintenance, including repairs.	Total cost of land, public works, improvements, machinery, and maintenance, including repairs.	Average yearly cost of maintenance for five years.
First-class navy-yards (at home):						
Portsmouth.....	1800	\$110,500.00	\$10,006,929.89	\$8,720,582.09	\$18,838,011.98	\$428,598.15
Boston.....	1800	360,782.26	14,015,799.50	16,007,646.23	30,384,227.99	910,585.41
New York.....	1801	690,123.15	25,807,974.92	81,177,278.60	67,635,376.67	1,938,452.92
Philadelphia.....	1868	Gift.	11,015,439.94	10,269,150.47	21,284,630.41	708,093.69
Washington.....	1800	157,099.00	11,909,124.71	13,197,175.25	25,323,388.96	728,605.26
Norfolk.....	1800	478,517.50	15,733,682.19	16,113,733.15	32,325,932.84	1,006,698.54
Mare Island.....	1854	83,491.00	17,644,057.09	17,383,162.17	\$5,000,710.26	1,051,424.93
Puget Sound.....	1891	18,212.50	6,610,377.53	\$3,769,602.96	9,338,192.99	469,012.97
Second-class navy-yards (at home):						
Charleston.....	1901	105,207.00	3,857,180.01	778,381.52	4,740,768.53	142,952.88
Pensacola.....	1828	(a)	7,700,637.10	4,516,794.01	12,217,431.11	340,011.95
New Orleans.....	1849	15,000.00	2,684,151.18	701,984.69	3,401,135.87	112,098.79
First-class navy-yard (abroad):						
Hawaii.....	1899	58,140.50	1,577,814.35	590,700.73	2,226,655.58	89,818.43
Second-class navy-yards (abroad):						
Cavite.....	1898	(b)	2,523,186.35	8,723,088.71	11,246,225.06	1,056,401.84
Olongapo.....	1901	(b)	2,908,849.48	909,515.30	3,818,364.78	177,265.33
Naval stations (at home):						
Port Royal.....	1883	5,000.00	1,173,647.78	1,100,002.00	2,278,649.78	24,351.76
Key West.....	1854	156,111.83	2,205,440.23	1,787,934.85	4,149,486.41	143,096.25
Naval stations (abroad):						
Guantanamo.....	1903	Leased.	1,189,237.01	969,211.60	2,158,448.61	178,131.23
San Juan.....	1898	(b)	73,754.06	770,265.31	844,019.37	95,746.86
Guam.....	1898	(b)	296,624.14	1,253,188.58	1,549,812.72	180,510.90
Tutulla.....	1900		489,353.09	447,005.83	981,484.31	64,258.52
Training stations:						
Newport.....	1869	69,850.00	2,378,171.72	4,778,286.21	7,226,307.93	506,917.90
California.....	1898	(a)	\$44,969.36	720,656.07	1,065,625.43	96,084.07
Great Lakes.....	1905	Gift.	2,591,516.58	313,306.90	2,904,833.48	62,661.38
Coaling stations:						
Frenchmans Bay.....	1899	24,650.00	541,167.44	57,884.54	623,701.98	8,655.55
Bradford.....	1900	35,000.00	1,148,944.80	220,530.88	1,404,481.68	38,589.37
Piehlinque, Mex.....	1900		51,804.41	20,032.78	71,837.22	2,019.94
San Diego, Cal.....	1904	(a)	204,758.85	26,822.98	231,581.83	4,742.17
Tiburon.....	1904	80,000.00	556,409.53	98,124.75	734,534.28	19,430.97
Miscellaneous:						
Sitka.....	1900	(a)	124,961.96	22,909.92	147,871.88	3,321.78
New London.....	1868	Gift.	431,037.46	337,561.68	768,599.11	13,156.05
Yokohama.....	1900		88,677.99	406,232.00	494,909.99	55,811.94
Annapolis (Naval Academy).....	1845	405,845.76	10,825,529.94	10,241,815.07	21,475,690.77	1,252,519.53
Naval provingground, Las Animas (naval hospital).....	1890	38,220.00	944,620.24	1,206,324.75	2,189,164.99	120,790.63
Culebra (naval base).....	1907	(a)	374,573.42	827,247.52	1,201,820.94	165,449.50
	1904	(b)	23,132.08	157,788.91	180,920.99	30,187.35
Total.....		2,836,875.89	159,173,516.34	158,601,914.51	313,206,613,796.71	12,251,954.84

* Military reservation.

† Acquired by conquest.

In the early days of our navy, when the ships' motive power was sail, distances were not so easily traversed as to-day, and it therefore was probably necessary to have places for repair and refit of naval vessels more frequently along our coast. For the reason that in the earlier days our coast defenses were of a minor character the first

navy-yards were generally placed some distance back from the coast, and because the old vessels of the navy were of light draft the question of depth of water was not important.

The sloop of war *Kearsarge*, built in 1861, was of 1,550 tons displacement and drew about 16 feet. Our latest battle ship is of 27,000 tons and is about 30 feet draft.

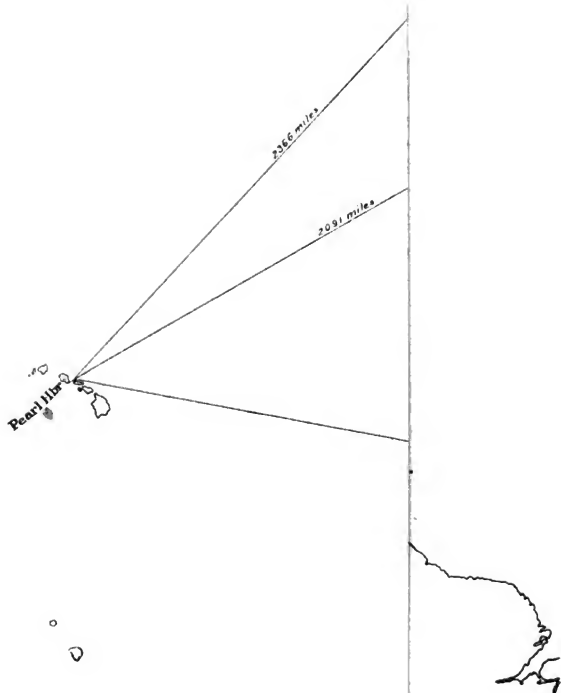
Some of our navy-yards now in existence have not sufficient water leading to them to allow the modern vessels to approach and lie at the docks. A number of them have not sufficient berthing space for the vessels, and the limited space available precludes its being supplied.

It is evident that a complete review of our navy-yards is necessary in order to cut down the number to that actually required for the needs of the fleet and to furnish adequate docking and repair facilities where the depths of water are sufficient for our present and future needs. On account of the limited number of docks available, it will not be possible to do away with navy-yards at which permanent and accessible docks are in existence. The yards which should not under present conditions be continued, except for the permanent docks, may be used for the repair and refit of the smaller vessels of the navy, keeping expenditures down to an economical minimum. Having a large amount of money invested and good facilities, the plan will be to utilize them to the best and most economical advantage.

The opinion of the General Board of the Navy, of Rear-Admiral Mahan, retired, and of various other officers of experience and knowledge on this subject has been secured. After a thorough inspection of all the navy-yards, and after considering the unanimous advice of these officers, I recommend that the navy-yards at New Orleans, La., and Pensacola, Fla., be given up, and that the Secretary of the Navy be authorized to make such disposition of the government property under the navy as may seem best. Both navy-yards are entirely unnecessary for the service of the fleet.

The New Orleans yard lies about 100 miles up the Mississippi River. It has a large floating dock, which can in emergency dock vessels of about 16,000 tons displacement; has modern shop buildings, and some excellent machine tools, in good condition. It lies behind a levee, which must be relied upon at high water or flood of the river to prevent the navy-yard and the machine tools from being flooded. Its position up the river is such that in time of war, or threatened war, no large vessels should be sent there on account of the danger of the passes being blocked.

The Pensacola Navy-Yard lies on a large sheet of water, but it and Pensacola Bay could probably be bombarded by an enemy's vessels in spite of the fortifications at that place. Moreover, as a navy-yard, it is strategically unnecessary.



The Gulf of Mexico has two entrances, Florida Strait, commanded by Key West, and the Yucatan passage at the west end of Cuba, which is some 30 miles wide. These two entrances may easily be guarded by our own cruisers to prevent forays or attacks on the Gulf coast by smaller scattered cruisers; it is inconceivable that an enemy's battle ships will ever penetrate the Gulf of Mexico, unless our fleet in the Caribbean has been defeated.

The Gulf coast and the Southern Atlantic coast are best defended by the effective occupation of Guantanamo naval station, in Cuba. In the event of hostilities on the Atlantic side our battle fleet will be based in the Caribbean Sea, and in that region Guantanamo Bay is the best suited by strategical and local conditions for that purpose. This requires the establishment of docking resources and defenses which will assure the free use of Guantanamo by the fleet. For the purpose of more ready comprehension of this situation a sketch map of the United States and its near-by outlying stations is included. This shows the strategic importance of Guantanamo in the defense of the Gulf coast, the Atlantic coast, and the Panama Canal, and will also show the strategic importance of Pearl Harbor in its relation to the whole Pacific coast.

Inspection of Guantanamo makes it clear that emergency docking and repair facilities should be provided there, so that in case of need injured vessels can be temporarily repaired, in order that they may quickly return to their positions in the fleet. With moderate expenditures an economical but efficient base can be supplied there which will be of inestimable value to the country.

Guantanamo Bay is an extensive harbor, with deep water capable of accommodating at anchor a fleet of 35 battle ships, with 16 more in the outer harbor, if necessary. It has been for some years used as the winter base of the fleet in its drills and exercises in the Caribbean Sea. A certain amount of preliminary work has already been done, and a moderate amount to carry on the work will be asked for. It is desired to transfer the floating dock at New Orleans to a location at Guantanamo, where there is already 44 feet of water, and to put up such shop buildings of inexpensive construction as are suited to the mild climate, and to transfer from the New Orleans and Pensacola navy-yards such machine tools and other equipment as will be useful at Guantanamo station. By thus making use of facilities already in possession of the Government future expenditures at Guantanamo will be reduced to a minimum. By the expenditure of between \$300,000 and \$400,000 a small but efficient repair plant can be installed at Guantanamo in about a year. This would comprise the floating dock from New Orleans, some tools from Pensacola and New Orleans, and the necessary buildings.

It would seem evident that of the naval stations on the Gulf coast Key West alone should be retained. The geographical situation of Key West as a base of supply to the fleet in the Caribbean leads one to this view. It is also a convenient point for the supply and quick repair of small gunboats and torpedo craft operating in the Caribbean Sea. For these purposes Key West is well located and supplements the naval base at Guantanamo efficiently. There already exists at Key West a coaling plant, a marine railway which can be adapted to take vessels of 1,000 tons, and suitable small shops for repairs of the minor character required. The railroad to Key West will soon be completed, thus facilitating the placing of supplies there. It has not been contemplated at any time to raise the importance of Key West as a naval station for battle ships or other large vessels. Its exposed anchorage and the extensive character of fortifications which would be required to develop it into a first-class base would make this inadvisable.

It should be pointed out here that in time of war there are two distinct lines of communication around Cuba from Guantanamo to Key West and the cities of the Gulf coast. The Gulf coast, being so entirely protected by our fleet in the Caribbean, can safely send supplies from all its cities to the Isthmus of Panama and to our fleet in the Caribbean. It may be confidently predicted that in time of war the cities of the Gulf coast will be, from their natural security, the chief sources of supplies and material and the probable points from which our troops will embark either for the Isthmus for further transit or for service in the Caribbean, as may be required.

The situation on the Atlantic coast as to navy-yards is a somewhat difficult one. Undoubtedly there are a greater number of first-class navy-yards than should be required for the efficient care of the fleet, including the auxiliaries and smaller vessels. As the Portsmouth, Boston, New York, Philadelphia, and Norfolk yards have accessible dry docks necessary for the battle-ship fleet and efficient plants for repair, it seems hardly advisable to give any of them up, especially as it will be possible and necessary on account of the dry docks to take advantage of their facilities in the most economical manner. Port Royal has a dry dock, but it is unapproachable for battle ships or even cruisers, except at an unjustifiable expense. The Charleston dock is useless for battle ships or cruisers, as it fills in opposite the dock at the rate of from 3 to 4 feet a year.

Undoubtedly the repair and the small amount of manufacturing work required for the navy could be done more economically in fewer yards, yet the fact remains that we have a large amount of money invested in docks and repair facilities, and the department would be embarrassed by arbitrarily abandoning those yards with dry docks capable of receiving battle ships.

I recommend, however, that the department be authorized to abandon and dispose of the naval reservations at San Juan, P. R.; Port Royal, S. C.; New London, Conn.; and Sackett's Harbor.

Some years ago we established a small naval base at Culebra, on government land. It is proposed to abandon this, as, while the expenditure of money on it is comparatively small, there seems to be no particular reason for its continuance.

A final recommendation as to the other yards and auxiliary stations on the Atlantic coast will be deferred until the subject has been thoroughly reviewed by the Joint Board of the Army and Navy.

THE PACIFIC COAST.

The Pacific coast of the United States is fortunate in that it has but two naval stations, both of considerable dimensions and well equipped with shops, etc.—one at Bremerton, on Puget Sound, and the other at Mare Island, near San Francisco.

The navy-yard at Bremerton has ample depth of water and is fairly well located, with excellent facilities, as far as they go. A new and large dry dock, capable of taking any existing or contemplated battle ship, is now about 50 per cent completed, and is expected to be finished about March, 1912. This navy-yard has a disadvantage in that it has no railroad communication, and all material and supplies must be transported to the navy-yard from Seattle, a distance of 15 miles, by water; also, in that it is 15 miles removed from any large supply of labor; and that to extend the area for shops or further docks considerable leveling of ground must be done. However, its further development is a necessity, in view of the fact that the fleet at some time after the opening of the Panama Canal may be based in the Pacific Ocean.

The other navy-yard on the Pacific coast, at Mare Island, lies some 30 miles inland from San Francisco, is difficult of approach for vessels of great draft on account of shallow water, has inadequate berthing facilities on its water front, a totally inadequate depth and width of water along its front, and is at a disadvantage by its distance from San Francisco Bay, where the coaling and supply of these vessels would ordinarily be carried on.

The approach of a large vessel to Mare Island lies across Pinole shoal, which has a least depth of 22 feet at mean low water. The shoalest point near the Mare Island Navy-Yard has a present depth of 20.2 feet at mean low water, which, however, can readily be dredged to 22 feet. The rise of the tide at this point is approximately 6.5 feet, so that a depth at high water of 28.5 feet is available. This is sufficient for the armored cruisers of the *West Virginia* and *Colorado*

classes to enable them to get through at high water, but it is not a sufficient depth for even these vessels to properly maneuver. Moreover, the waters of San Pablo Bay and the approach to Mare Island are filled with mud in suspension which is very deleterious to the condensers of these vessels, either when under way or when lying alongside of the sea wall at Mare Island Navy-Yard. The present depth opposite the Mare Island Navy-Yard water front at a distance of 10 feet away is from 17 to 18 feet, and vessels lying alongside that sea wall at low water lie in the mud to a depth of about 6 feet.

Due to insufficient depth of water in front of Mare Island Navy-Yard the following ships could not be berthed there: *Arkansas, Delaware, Florida, North Dakota, Utah, Wyoming*, battle ship 34, and battle ship 35. Owing to the present condition of the channel approaching Mare Island the same ships could not be docked in the largest dock at Mare Island. This statement represents conditions with the ships mentioned at their normal displacement, and it does not take into consideration the fact that no battle ship or other large vessel can approach Mare Island in a damaged condition. In other words, a battle ship which has been injured in action and may be drawing possibly 35 feet of water can not be taken to Mare Island to be even temporarily repaired.

At mean low water, with a depth of 20.2 feet over the bar, none of our battle ships or armored cruisers could get to Mare Island, nor could the *Charleston, Columbia, Milwaukee, Minneapolis, Olympia*, or *St. Louis* of the cruiser class, a total number of vessels of our navy of 53. At mid-tide, 23.45 feet depth, no battle ship or armored cruiser could approach Mare Island. The total number of vessels in this category would be 47. The same vessels that could not get over the bar at mean low water near Mare Island could not get through the channel over Pinole shoal at mean low water, and at mid-tide over Pinole shoal a total of 22 vessels, comprising battle ships and armored cruisers, could not pass. The figures and vessels given above are based on a clearance of but 12 inches under the keels of all these vessels.

With a view to improving the conditions in the approaches to Mare Island Navy-Yard, a board of army and navy members was appointed in March, 1908, by order of the President, to study the conditions and report upon what methods were possible to make Mare Island Navy-Yard accessible to our larger vessels. Seven methods were considered and one method was recommended which was considered the best to provide the greatest possible depth. This was, in effect, that certain dykes should be constructed, with the idea that they would assist in maintaining the channel, that the channel would be dredged, and that the Government maintain a self-contained and self-propelling

dredge, which could be operated during a certain portion of every year to maintain, with the assistance of the dykes, the channel to the necessary depths. The estimate of the board of the cost of this work was—

For dredging Mare Island channel.....	\$375,000
Extension of dikes in strait and entrance.....	120,000
Extension of Dike No. 12 in San Pablo Bay.....	400,000

A total of..... \$895,000

or approximately \$900,000, with an annual maintenance for repairs of dykes and dredging of \$70,000.

For the equally necessary channel over Pinole Shoals, in San Pablo Bay, the board recommended the dredging and maintenance of the channel 500 feet wide and 30 feet deep at low water, at an estimated cost of \$510,000 and an annual maintenance of \$100,000. This latter would come under expenditures in the War Department.

On the basis of the Government owning the dredge, however, the annual cost of maintenance of the Mare Island strait and channel and the channel over Pinole Shoals was estimated to be about \$125,000 per year, after the dikes had been constructed and the dredge purchased.

The method recommended requires regular appropriations, which, since the report of the board, have not been made. It is, moreover, a question as to whether the method proposed will certainly secure the depth needed to make Mare Island accessible for our largest vessels. Furthermore, even if this depth was permanently secured, the narrow width and the depth of the channel opposite Mare Island is such that the maneuvering of large vessels, or even the turning of them around, would be difficult.

It appears certain that the digging of a deep channel and approaches to the Mare Island Navy-Yard is a question of material expense, with the question of whether a sufficient depth could be maintained. The draft of a damaged vessel will approach 35 feet, and even with the improvement which it is hoped may be accomplished there would not be sufficient water to get a damaged battle ship to Mare Island.

The total expenditures at Mare Island have reached, in all, about \$14,000,000. In order to make use of the existing facilities, it would appear to be wise to utilize this navy-yard for those vessels which can get to it; also for such manufacturing and repair work for the larger vessels as can readily be sent to the navy-yard and returned to the vessels lying in San Francisco Bay.

After a study of this question and a personal inspection of Mare Island and the available sites on San Francisco Bay, I conclude that

it will be necessary to establish a docking and repair station for battle ships on San Francisco Bay in some locality yet to be selected. I have examined several locations, which are now being considered. Such a repair station should include one or more docks of the largest size, with ample depth of water for taking our largest existing and contemplated battle ships, and such additional repair facilities as may be necessary for the repair of the damaged hulls of battle ships. The docks would always be used for taking the largest vessels of the navy and the facilities for repair should be limited to what is absolutely necessary for the repair of a damaged battle ship. This matter will be taken up and further recommendation made when the best course is decided on.

Unless the deep water battle ship repair station is established at San Francisco the fleet must inevitably depend upon the Puget Sound Navy-Yard for its docking and repair. While this fact seems beyond question, it must be pointed out that it will not do to depend upon one navy-yard alone for docking and repair facilities for the battle-ship fleet.

In the vicinity of San Francisco, and also at other naval stations, there has been a tendency in the past to scatter the different adjuncts of the navy-yard and to place them at distances somewhat removed from the navy-yard itself. This is an uneconomical and unbusiness-like method, and I propose to correct it wherever possible and to have established hereafter a uniform policy for the extension of navy-yard facilities in such a way that the new adjuncts to a navy-yard will be located near by, with the idea of preventing the growth of separate naval establishments.

CAVITE AND OLONGAPO.

The decision has been reached, on the recommendation of the joint board last year, to make Pearl Harbor our principal insular naval base in the Pacific Ocean. Olongapo, in the Philippines, is to be a small repair station for vessels on the Asiatic Station, and I recommend that the station at Cavite be given up and the department authorized to dispose of it and its facilities. In that case, the facilities at Cavite will be transferred to Olongapo.

The average yearly cost of maintenance for the Cavite station during the past five years has been \$1,056,401.84.

SUMMARY OF RECOMMENDATIONS.

NAVY-YARDS.

I have recommended in this report giving up and disposing of the naval stations at New Orleans, Pensacola, San Juan, Port Royal, New London, Sacketts Harbor, Culebra, and Cavite.

The average yearly cost of maintaining these stations for the past five years has been \$1,672,675. Very little useful work has been performed at any of them.

No recommendations in regard to coaling stations are made, though it is likely that we have some that should be dispensed with. This phase of the subject will be considered by the joint board and will be included in the final recommendations on this subject.

DOCKING FACILITIES.

Enough docks of the largest size and suitable channels to them should be available so that, in case of necessity, the largest vessels may be got ready at once in case war is declared quickly and so that they will not have to wait for the few big docks. Such docks are also necessary for docking damaged vessels which may draw about 35 feet.

There is at present only one dry dock constructed and in commission which is capable of taking a damaged vessel drawing 35 feet at all stages of the tide. This is the steel floating dry dock *Dewey*, stationed at Olongapo.

There are in course of construction three docks affording this facility, namely: New York, No. 4; Puget Sound, No. 2, and Pearl Harbor, No. 1. These docks will be completed in 1912.

One million one hundred thousand dollars of the amount authorized are yet to be appropriated for the completion of dry dock No. 4 at the New York Navy-Yard. The present contract calls for completion on May 12, 1912, and the estimate of funds required during the current year was based upon the contract rate of progress. As a matter of fact, however, the contractor has made such rapid progress on this work that it stands to date nearly 60 per cent completed. On this account the funds available will be insufficient to carry the work to the end of the fiscal year, and an estimate of \$550,000 will be submitted for inclusion in the urgent deficiency bill. Authority to construct this dock was originally granted by Congress on June 7, 1900, but the failure of two contractors to carry out their obligation has greatly delayed construction. The department has every reason to believe that the present contractors will complete the work by December 31, 1911, if the \$550,000 is placed in the urgent deficiency bill.

INCREASE OF THE NAVY.

The Department recommends the authorization of the following additions to the naval establishment for the coming fiscal year: Two battle ships, one collier, one gunboat, one river gunboat, two sea-going tugs, two submarines, and one submarine tender.

It is of great importance that the construction of the navy should proceed on a regular and systematic plan. The arguments for such a

policy, based upon the necessity of maintaining our relative position as a naval power in the interest of the preservation of peace, have been very thoroughly presented.

In addition, however, to this it is important to lay especial emphasis upon the effect of any break in this policy upon the shipyards of the country. The navy must be, to a certain extent, dependent for its material and, to some extent, for its repair facilities, in war time, on these establishments. Their preservation and continuance in business are necessary to the national safety. It is in this light that the need for a regular system of naval appropriations becomes of additional importance. Two battle ships a year, with minor construction, is about as little as will suffice to obtain the result.

GUNBOATS.

The small cruisers and gunboats remaining on the navy list are rapidly becoming useless through age and consequent deterioration. No vessels of these classes have been added to the navy for many years, it having been the policy of the department to concentrate its efforts upon building up the main fleet and to minimize expenditures on vessels of slight military value. A certain number of gunboats are absolutely necessary, however, for police duty, surveying, and other work incidental to times of peace, and the time has come for the gradual replacement of obsolete and worn-out gunboats by new construction. In this connection the department invites attention to the fact that it is more economical to build new vessels than to continually repair those which have outlived their usefulness. The department, therefore, recommends the construction of gunboats each year until the existing vessels of that class are replaced.

REPLACEMENT OF OBSOLETE SHIPS IN BATTLE FLEET.

It may be assumed that a battle ship is available for duty in the first line during the first ten years of her life, reckoned from the date of laying her keel; and that she should be relegated to the second line during the second ten years of her life. These limitations are the result of progress and evolution in design of ships and ordnance rather than actual decrease of efficiency of the ships themselves; in other words, experience has shown that ships become obsolete within twenty years and that during only half that period are they eligible for the first line.

Under the assumption that the United States will continue to authorize only two additional battle ships per year, the fleet during the next ten years will have the following strength:

Year.	Battle ships less than 10 years old.		Battle ships 10 to 20 years old.		Total.
	Dread-naughts.	Pre-dread-naughts.	Dread-naughts.	Pre-dread-naughts.	
1911	6	15		10	31
1912	8	13		12	33
1913	10	13		10	33
1914	12	11		11	34
1915	14	6		16	36
1916	16	1		20	37
1917	18			21	39
1918	19		1	18	38
1919	18		4	16	38
1920	18		6	16	40

The standard of strength of the fleet must from year to year be considered in its relation to that of other powers, but if we assume that only 2 ships per year are to be authorized, to give a first line of 20 ships and a second line of 20, we must also consider the fact that in 1916 the first line will be reduced by the withdrawal of obsolete ships to 17.

This condition results from the fact that the increase of the navy in the past has been very irregular. Had there been a regular flow of construction having in view a definite standard of strength of fleet this condition would not now obtain, and our ships would become obsolete only as rapidly as new ships were available to replace them.

It is manifest that if we are to maintain a fleet of 20 ships in the first line—and this should be regarded as a minimum—there must be authorized, in addition to 2 ships per year after 1912, a sufficient number to prevent the first line from falling below 20; in other words, the withdrawal of obsolete ships must be anticipated by authority for replacements.

PREPAREDNESS FOR WAR A PREVENTIVE.

All nations are in accord in expressing a desire for peace. The question has even been agitated that there should be an international court of arbitration or supreme court for the adjudication of international affairs. Unfortunately, we are, in all probability, somewhat distant from any such arrangement, but even if that should come the court's decrees would be of no avail unless they could be carried out, and under the most favorable circumstances it will be necessary for at least five or six of the nations to maintain navies which will be able to enforce the decrees of the international court against any single nation that might object to its decisions.

Notwithstanding the improbability of war and the reliance placed on the nation's isolation and resources, history and experience teach us that circumstances may arise at any time which might involve us in war unless we are sufficiently prepared to prevent it. The delusion that a nation with a large population, great wealth, and resources is immune from attack has been dispelled by the history of war.

Every nation which is forced to play an important part in the affairs of the world or is desirous of protecting her own interests must be always prepared to defend her interests at home and the investment of her capital abroad.

Experience has shown the wisdom of systematic preparation for war. If we wait until a crisis comes, it is then too late to make effective preparations, and the result is confusion, waste, and unnecessary loss of life.

In any war involving the United States the control of the sea will be of the utmost and deciding importance. Such control can be obtained only by an efficient navy of sufficient strength.

FOREIGN SHIPBUILDING PROGRAMS.

The latest step in the development of the all-big-gun type of battle ship has been the introduction of 13.5-inch guns in the British navy and 14-inch guns in the United States Navy. Press reports state that Germany also has been conducting experiments with 14-inch guns and is about to introduce them on her latest ships.

Another innovation is the triple-gun turret which is being installed by Italy and Russia. The Italians are reported as installing a combination of both double turrets and triple turrets on their new ships, enabling them to carry thirteen 12-inch guns in five turrets. The new Russian ships are to carry twelve 12-inch guns in four triple-gun turrets.

Displacements, as might be expected, have been still further increased, in spite of the agitation in some quarters for a return to smaller battle ships. Turbines are universally adopted as the mode of propulsion.

Nearly all European powers and Japan are building all-big-gun ships. In South America, Argentina and Brazil have such ships already built or building, while Chile is about to follow.

England, Germany, and Japan are the only powers which are now laying down so-called armored cruisers. The latest ships of this type in England have far outdistanced their contemporary battle ships in displacement and speed, while carrying the same caliber of heavy guns, although fewer in number, and having but slightly less armor protection. They deserve the name of battle-ship cruiser now commonly applied to them, for they have outgrown the class of armored cruiser as formerly understood. It would seem that the nations

building such ships are in reality building two types of battle ships, fast and slow. The battle-ship cruiser is now generally considered as being practically in the battle-ship class and counted as a capital ship.

Nearly all the principal naval powers, among the exceptions being the United States, are building fast scout cruisers and protected cruisers in addition to the heavy ships, and their building programmes always include torpedo-boat destroyers and submarines.

The following are the shipbuilding programmes of the various naval powers:

GREAT BRITAIN.

The shipbuilding program authorized for 1910-11 provides for the following new construction: Five large armored ships, 5 protected cruisers, 20 destroyers, and a number of submarine boats, estimated to cost a sum of £750,000 (\$3,649,875) in all.

The following fleet auxiliaries were also authorized: One submarine depot ship, two submarine tenders, and one salvage steamer. The salvage steamer is expected to be specially designed for the raising of submarines.

The total estimates for 1910-11 amount to \$197,597,906, as compared with \$170,361,950 for the preceding year.

The personnel for manning the fleet was increased by 3,000.

The four so-called contingent ships authorized in 1909 were laid down in April, 1910. They are the battle ships *Monarch*, *Thunderer*, and *Conqueror* and the battle-ship cruiser *Princess Royal*. The battle ships will be similar to the *Orion*, of about 22,500 tons displacement, 21 knots speed, and will carry 13.5-inch guns. The *Princess Royal* to be a sister ship of the *Lion*, of about 26,350 tons displacement, 28 to 29 knots speed, and also to have 13.5-inch guns.

The Australian and New Zealand Governments have passed acts authorizing the construction of two armored cruisers of the *Indefatigable* type. These two ships have been laid down, and when completed the New Zealand contribution will form part of the royal navy, while that of Australia will form part of the Australian unit.

The Canadian government has purchased the *Rainbow*, a second-class cruiser, for use as a training ship, and also the first-class cruiser *Niobe*. Canada is also to build 4 Bristols, 1 Boadicea, and 6 destroyers.

Two large floating dry docks, capable of taking any war vessel now building or likely to be designed, authorized in 1909, have been ordered and are expected to be completed during 1911. Two more floating docks are included in the estimates for 1910-11.

The first lord of the Admiralty in his statement to Parliament on the navy estimates, 1910-11, states that provision was made in the navy estimates 1909-10 for work in connection with aerial naviga-

tion, and important experiments have been carried out by the recently formed aeronautical branch. The design of an experimental airship has been completed, and a ship is now under construction. It is expected that this ship will be completed and ready for trials during the summer of this year, when a large number of experiments will be made to test the value of this vessel under all practical conditions.

GERMANY.

The German naval appropriation bill for 1910-11 authorized the construction of the following: Three battle ships, 1 armored cruiser, 2 scout cruisers, 12 torpedo-boat destroyers, and 15,000,000 marks (\$3,570,000) for submarine-boat construction and experiments.

The contracts for the above vessels have already been awarded, and it may be presumed that they have all been laid down.

In accordance with the fleet law, the following vessels will be appropriated for in 1911: Three battle ships, 1 armored cruiser, 2 scout cruisers, 12 destroyers, and a sum of money for submarine-boat construction and experiments. This latter sum of money is usually as designated by the Germany navy department.

During the year 1910 the battle ships *Posen* and *Rheinland* and the armored cruiser *Von der Tann* will have been completed.

Press reports state that experiments have been conducted with a new 14-inch gun, and that the new battle ships will be armed with guns of this caliber. The same reports give the displacement of these ships as 27,000 tons.

The old battle ships *Weissenburg* and *Kurfuerst Friedrich Wilhelm* were sold to Turkey.

The total naval estimates for 1910-11 amount to 443,000,000 marks (\$106,320,000).

FRANCE.

The naval estimates for 1910-11, as authorized, provide for the construction of the following: Six destroyers of 750 tons displacement, 2 destroyers of 427 tons displacement, 2 torpedo boats of 180 tons displacement, 3 submarines.

A special bill was passed which authorized the construction of two battle ships, ordered to be laid down in August of this year. These battle ships are to be of about 23,400 tons displacement, 20 knots speed, and to carry twelve 12-inch guns.

The minister of marine has submitted to Parliament a proposed law for fixing the composition of the French fleet. This is to be accomplished by means of a continuous shipbuilding program extending to the year 1919, in which year the French navy is to attain the strength proposed. The composition of the fleet is to be as follows:

1. THE FIGHTING FLEET.

Twenty-eight battle ships, forming 4 squadrons of 6 battle ships each, and 4 reserve battle ships.

Ten squadron scouts, on the basis of 2 scouts per squadron, and 2 reserve scouts.

Fifty-two destroyers, on the basis of 12 destroyers per squadron, and 4 reserve destroyers.

2. NAVAL DIVISIONS ABROAD.

Ten vessels for naval divisions abroad, with dispatch and gun-boats as required.

3. SUBMARINE DEFENSE FLEET.

Ninety-four submarines, 4 mine ships.

Counter mining (mine dragging) vessels according to necessity.

4. SPECIAL SERVICE VESSELS.

Hydrographic vessels, coast transports, school ships, and guard ships for fisheries, according to necessity.

This proposed law has not yet been passed by Parliament.

The total estimates for 1910-11 amounted to 371,475,000 francs (\$74,295,000).

JAPAN.

There are at present under construction the battle ships *Aki*, *Settsu*, and *Kawachi*; the armored cruiser *Kurama*; three cruisers of about 5,000 tons displacement; two destroyers of about 1,100 tons displacement; and some submarines. Of these the *Aki* and the *Kurama* are nearly completed.

At present there exist three authorized programs, to be accomplished by 1916, under which shipbuilding is carried on. According to these programs there still remain to be commenced the following vessels: One battle ship, 3 armored cruisers, 2 cruisers, several destroyers and torpedo boats.

The estimates for 1910-11 called for the first installment for a new armored cruiser, which is to be laid down after the launching of either the *Settsu* or *Kawachi*. According to press reports this armored cruiser is to have a displacement of 18,500 tons.

RUSSIA.

The construction of the four new battle ships, *Sebastopol*, *Petropavlovsk*, *Poltava*, and *Gangut*, is progressing slowly. According to press reports, the main characteristics of the ships are as follows: Displacement, 23,000 tons; horsepower, 42,000; speed, 23 knots; battery, twelve 12-inch guns, twenty 4.7-inch guns, four 47-mm. guns.

The 12-inch guns are mounted in four triple-gun turrets, a new departure in war-ship building.

A number of destroyers were begun during 1910, but very little other shipbuilding seems to have been undertaken.

ITALY.

The present program of construction of the Italian navy, which is to be accomplished by 1916, provides for the following: Four battle ships, 3 scout cruisers, 12 destroyers, 50 torpedo boats, 12 submarines, 1 submarine docking ship.

Of the battle ships the *Dante Alighieri* was laid down in June, 1909. The other three are to be laid down this year. They are to be named *Conte di Cavour*, *Giulio Cesare*, and *Leonardo da Vinci*. Their displacement will be about 22,000 tons, and they will carry 12-inch guns in triple-gun turrets:

The three scout cruisers have been commenced and will be named *Quarto*, *Marsala*, and *Nino Bixio*.

Contracts have been awarded for the 12 destroyers, 30 out of the 50 torpedo boats, 11 submarines, and the submarine docking ship.

AUSTRIA.

The Austro-Hungarian delegations are expected to meet in November, and the naval estimates for 1910-11 will then be submitted.

It is known that the Stabilimento Tecnico, at Trieste, has commenced the construction of two dreadnoughts. At present this is done at their own expense, for these ships have not yet been authorized by the delegations. Press reports state that the estimates for 1910-11 will undoubtedly contain the first installments for these ships, and that authority will be asked to lay down two more in 1911. The displacement is given as being about 20,000 to 22,000 tons.

ARGENTINA.

The Argentine Government has ordered two battle ships, of about 28,000 tons displacement, from the Fore River Shipbuilding Company, which company has sublet the construction of one of these ships to the New York Shipbuilding Company. There are also under construction in Europe 12 destroyers—4 in England, 4 in France, and 4 in Germany.

BRAZIL.

The battle ships *Minas Geraes* and *Sao Paulo* have been completed. A third, to be named *Rio de Janeiro*, has been commenced in England.

A movement has been initiated by the Brazilian Navy League to procure funds by popular subscription for the building of a fourth battle ship, which is to be named *Riachuelo*.

CHILE.

The Chilean Government has asked for tenders for the construction of one 20,000-ton battle ship, four destroyers, and two submarines.

PERSONNEL LEGISLATION.

Since my last annual report your special message urging suitable personnel legislation has been addressed to Congress. The Senate and House Committees on Naval Affairs both made request for the department's measure, which was introduced in both Houses (S. 7909; H. R. 22319).

This measure has for its main object the arrival of flag officers and captains in their grades at an earlier age than is now the case, thus enabling them to render an adequate service before reaching the age of retirement. Our flag officers are the oldest in the world, as has been repeatedly shown in these reports. The fact that they retire within a year or two of attaining such rank is incompatible with the development of efficiency in the commands to which they are assigned, which, in the continued development of the fleet, have now reached the very highest importance.

The present laws could not have been better devised as a paternal arrangement to permit practically all line officers to reach flag rank and retire at the highest pay.

The proposed law allows only a limited number to reach this rank, thus assuring a longer service for those who do reach it. The surplus are retired in the lower ranks as their services can be spared.

There is no resultant increase in expense. This is brought about by reducing the proportion of officers who retire at the highest pay, though increasing somewhat those who retire at lower rates.

Two additional higher grades are recommended. This matter should be placed squarely on the basis of military necessity and national dignity and self-respect. Foreign nations have admirals of the fleet (grand admiral), admirals, vice-admirals, rear-admirals. We have only rear-admirals. In international council or combined operations with foreign nations our admiral always comes last. There are now five rear-admirals in the Atlantic Fleet. From the point of view of military efficiency, it is opposed to all propriety and common sense that these five flag officers should all have the same rank.

The opposition hitherto to the higher ranks has seemed to come from a tradition, based on a period when fleets were of less fighting strength and one flag officer in the same fleet was enough, that any higher rank than that of rear-admiral was not necessary from a military point of view and was to be bestowed only as a reward for exceptional service. Conditions in the navy to-day are as utterly different as the nation itself is different from the nation of civil-war period, or even of the Spanish war.

An artificial "hump" is now forming in the lower grades of the line owing to the fact that ensigns are entering the grade of lieutenant (junior grade) at the rate of about 160 annually, and are being promoted therefrom at the rate of 40 annually. It is sometimes proposed to remedy this difficulty by reducing the number of graduates or by discharging graduates. Apart from the lack of economy of such method, the present number of graduates was authorized in order to overcome an existing shortage of officers. As long as such shortage exists, as it does, the appointing of midshipmen only to discharge them as graduates will defeat the end of the measure. The true solution is to spread the total number of officers through all the grades in suitable proportions, or percentages, of the whole. This is the method of the proposed bill, the result of which is the immediate dissipation of the "hump," the creation of which has been entirely artificial.

The principles of the measure in general are applied to line and staff alike, as far as may be. By proposed amendment, staff officers will go up practically with their opposite number in the line as far as the grade of captain.

It is to be hoped that a bill on the principles of the department's measure may pass Congress this winter. No one law could so add to the efficiency and fighting strength of the navy as a measure designed to give younger and more efficient captains and flag officers.

PUNISHMENTS IN THE NAVY.

The department has been considering the question of punishments for various offenses committed by the enlisted personnel of the navy, and whether certain modification should not be made in them. While the few dangerous criminals found in the navy are sent to states prison under existing law, I am of the opinion that in our naval prisons a number of inexperienced young men, without real criminal tendencies, are mixed in with others who have such criminal instincts, to the great detriment of the former. The department will endeavor to adopt a system of detention camps or ships, which will entirely separate ordinary offenders against discipline from the criminal prisoners. Many of the offenses for which enlisted men are confined in naval prisons are those due to the youth and inexperience of the offenders. It seems proper that the punishment for these offenses should be of a detaining or restrictive class, rather than a prison punishment, which carries with it contact with criminal characters, the ignominy of a prison garb, and in many cases the loss of civil rights.

It is estimated that in the last year a total of about \$700,000 has been taken from the pay of the enlisted men of the navy by fines in-

flicted by sentence of general, summary, or deck courts. The Department is considering recommending a change in the laws which prescribe this method of punishment, and suggesting some method by which a part of these fines at least may be kept to the credit of the man until the expiration of his enlistment; in other words, he is only estopped from using a portion of his pay, should that be the punishment given by the court.

The offenses of absence without leave, desertion, and fraudulent enlistment furnish a great number of offenses against discipline. These would be materially reduced if a closer scrutiny were made of those seeking to enlist in the navy. I intend, as far as possible, to have the moral character and habits of those who wish to enlist in the navy more carefully scrutinized, in order to carry out this plan. It will undoubtedly somewhat reduce the number of those who enlist, but it will also reduce the number of offenders of every class and will probably cause an even greater proportionate reduction in the number of deserters.

NAVAL RESERVE.

The department renews its recommendation that legislation be enacted for the establishment of a naval reserve of officers and men.

The department has submitted a draft of a bill embodying its ideas for the legal establishment of a naval reserve of officers and men, which has been introduced as S. 7644 and H. R. 24942, entitled "A bill to provide for a reserve of personnel for the United States Navy and Marine Corps and for its enrollment," and is now before both Houses of Congress awaiting action.

NAVAL MILITIA.

The naval militia now comprises about 7,000, organized under the laws of the different States bordering upon the seas and upon the Great Lakes, with several additional organizations in prospect of enrollment as soon as the state legislatures pass the necessary enabling acts. These separate organizations, as they are at present, are not under central control and training. The formation of a naval militia on the general lines of the legally organized land militia is a necessity, and legislation is required to accomplish this.

The duties of the naval militia in time of war are of sufficient importance to warrant its coordination in training and discipline with the Regular Navy, and the militia should be given encouragement in order that the number may be greatly increased.

During the past year certain naval militia organizations were sent upon their annual summer training cruises on board the battle ships of the Atlantic Fleet, thus affording them an opportunity for train-

ing with the latest and best naval material, and also bringing them into close touch with the Regular Navy. In these instances the militiamen were distributed among the regular crews and the officers among the officers of the battle ships. Other organizations of the naval militia received their drills upon the vessels assigned to them, officers of the Regular Navy being detailed to supervise and report upon the exercises, and the records of these practice cruises were excellent.

The department has carefully considered the question of the organization and training of the naval militia and has had the General Board review the bill submitted to Congress last session. This bill has been reported as H. R. 17759, Union Calendar No. 307, Report No. 1712, entitled "A bill to promote the efficiency of the naval militia, and for other purposes." With certain additional necessary and advisable modifications, which the department will submit, it meets with my approval

NAVY PENSION FUND.

In accordance with the provisions of section 3667 of the Revised Statutes, which reads:

The Secretary of the Navy shall annually submit to Congress estimates of the claims and demands chargeable upon and payable out of the naval-pension fund—

it is reported that the balance on the books of the Treasury to the credit of "navy-pension fund" (interest) on June 30, 1910, was \$448,765.08. On July 1, 1910, \$70,605.86 was, in accordance with the provisions of the act making appropriations for the naval service approved June 24, 1910, transferred to the credit of the appropriation "Naval Home, Philadelphia, Pa., 1911," and the remainder, \$378,159.22, in accordance with the provisions of the act making appropriations for the payment of invalid and other pensions approved June 25, 1910, was transferred to the credit of "Navy pensions, 1911," on the books of the Interior Department.

MARINE CORPS.

The present system which provides for the appointment of the major-general, commandant, of the Marine Corps for an indefinite term of years, and for a special adjutant and inspector's corps is not to the best interests of the service. This view was thoroughly confirmed by the report of a board of inquiry appointed by me this year to investigate certain phases of the conduct and discipline of the Marine Corps. After going into the subject very thoroughly, the board reported, among other things, that whatever lack of discipline existed came in great part from a too long tenure of office. On account of permanent assignment to desk work, officers of the ad-

jutant and inspector's department necessarily lose touch with practical field work, a thorough knowledge of which is essential to the proper performance of the duties of an officer of that branch.

In the interests of good administration, better discipline, and a more efficient organization, I strongly recommend that a law be passed at this session of Congress providing for the appointment of a major-general, commandant, of the Marine Corps for a period of four years, and for the detail of officers from the line to the position of adjutant and inspector.

Directions were given during the past year that all construction work heretofore done by the quartermaster's department of the Marine Corps should be carried on by the Bureau of Yards and Docks, under the belief that better and more economical results can be secured by this method of procedure.

The Department has come to the conclusion that there should be two principal marine posts, one on the Atlantic and one on the Pacific coast, that the main body of marines should be stationed at these two points, and that there should be stationed in the other navy-yards only a force sufficient to police the yards and to perform the other duties usually assigned to marines. The establishment of the two principal marine posts suggested will provide experience for the higher ranking officers of the corps in the command of bodies of men more in keeping with their rank and more nearly approximating the size of the force which would necessarily come under their direction in time of war. Not only would this afford better training to the officers and men in times of peace, but it would insure a greater concentration and more rapid embarkation when their services are desired.

SPECIAL LEGISLATION.

The department renews its recommendation that special legislation looking to the promotion, reinstatement, or other advancement of particular officers be avoided, except in special cases of particular hardship or injustice.

LEGISLATION.

THE PAUL JONES CRYPT.

Since 1905 the remains of John Paul Jones, a national hero, have been at the Naval Academy, Annapolis, without an appropriate crypt or mausoleum. Legislation has been repeatedly urged to provide such a crypt, and on March 2, 1908, the Senate passed a bill appropriating \$135,000. This bill failed of passage in the House.

The department renews its recommendation that \$135,000 be appropriated to provide an appropriate resting place for the remains of John Paul Jones.

MISCELLANEOUS.

In my last annual report certain legislation was recommended which I would be glad to again present this year. This relates to medals of honor for commissioned and warrant officers of the navy; the examination of warrant officers for promotion; the naturalization of naval aliens; the extra numbers borne on the list of line officers who are not available for sea service; the promotion of officers found physically disqualified on examination for promotion; the term of suspension for officers failing of promotion; the administration of oaths by boards of inquest, by officers detailed to investigate frauds and irregularities, and by assistant adjutants and inspectors of the Marine Corps; and the desirability of legislation permitting enlisted men of the Marine Corps to be designated as navy mail clerks.

PENSIONS FOR MIDSHIPMEN.

There is no law covering the retirement of midshipmen injured or incapacitated while serving the two years' probationary period after leaving the Naval Academy. As these young officers are performing the regular junior duties of naval officers at sea it is only just that the law should permit of their being retired, as is the case with all commissioned officers and enlisted men, and the department recommends legislation to this effect.

PROMOTION OF WARRANT OFFICERS.

The present law provides that warrant officers shall be promoted to the rank of chief in their respective grades after service of only six years as warrant officer. This length of service is regarded as being too short a time. The effect of this law is to produce a disproportionately large ratio in the grade of chief warrant officer, while retaining in the lower grade a much smaller number. It seems advisable that this condition should not continue, and the department therefore recommends that the present law be amended to require a longer term of service in the lower grade of warrant officer.

GRADED RETIREMENT FOR ENLISTED MEN.

The department forwarded to Congress last winter a draft of a bill providing for graded retirement of enlisted men, which was reported favorably by the Senate Naval Committee on May 27, 1910. In the interests of the enlisted men, and because it will probably produce greater efficiency in the service, the department again recommends the passage of this bill.

NAVY PENSION FUND.

The department recommends that legislation be provided placing inmates of naval homes on the same footing as inmates of soldiers' homes in regard to their pensions. The law requires that the pensions of such inmates of naval homes be paid in for the benefit of the navy pension fund. In the case of inmates of soldiers' homes, such pensions are held intact for their benefit upon discharge, or, under certain circumstances prescribed by law, a portion may be paid to a deserted wife or a dependent child. The same law should apply to pensions of inmates of naval homes.

THE DISCOVERY OF THE NORTH POLE.

The discovery of the North Pole by Robert E. Peary, U. S. Navy, after years of patient and arduous endeavor, is an event which has added to the honor and credit of our country. It is fitting that the Government should recognize the value of his services and their successful termination.

If it meets with your approval, I recommend that Peary, the discoverer of the North Pole, be given a commission by legislation as rear-admiral of the Corps of Civil Engineers of the Navy, to date from April 6, 1909, the date of his discovery of the Pole, and that he be retired as of that date with the highest retired pay of that grade.

Respectfully submitted.

GEORGE V. L. MEYER,
Secretary of the Navy.

The PRESIDENT.

APPENDIX

MOVEMENTS OF VESSELS.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Abarenda (collier).....			<i>Knots.</i>	Collier service on the Atlantic coast.
[Placed out of service Oct. 6, 1909, at the navy-yard, Norfolk, Va. Placed in service May 19, 1910, at the navy-yard, Norfolk, Va.]				
Aecomac (tug).....				At the navy-yard, Pensacola, Fla.
Active (tug).....				At the navy-yard, Mare Island, Cal.
Adams (wooden cruiser).....				Public Marine School, Philadelphia.
Adder (submarine), Lieut. OSCAR F. COOPER, commanding.				Attached to the Asiatic Torpedo Fleet.
[Placed out of commission July 26, 1909, at the navy-yard, Norfolk, Va. Placed in commission Feb. 10, 1910, at the Naval Station, Olongapo, P. I.]				
Ensign JAMES B. HOWELL, commanding.				
Alleen (converted yacht).....				At the navy-yard, New York.
[Returned to the department by the Naval Militia of New York, Nov. 18, 1909, at the navy-yard, New York. Assigned to duty with the Naval Militia of Rhode Island, June 2, 1910.]				
Ajax (collier).....				Collier service on the Atlantic coast.
[Placed out of service July 20, 1909, at the navy-yard, Portsmouth, N. H. Placed in service Apr. 30, 1910, at the navy-yard, Portsmouth, N. H.]				
Alabama (battle ship), Lieut-Com-mander THOMAS P. MAGRUDER, commanding.				At the navy-yard, New York.
[Placed out of commission Aug. 17, 1909, at the navy-yard, New York.]				
Albany (cruiser, third class), Com-mander JAMES H. OLIVER, com-manding. Relieved by Com-mander CLARENCE S. WILLIAMS, Apr. 14, 1910.				
San Pedro, Cal.....	1909. July 9	1909. July 17		To attend Elks' Carnival at Los Angeles.
San Francisco, Cal.....	July 18	July 25	368	For stores.
California City, Cal.....	July 25	July 26	6	For coal.
San Francisco, Cal.....	July 26	Aug. 10	6	To give liberty.
Bremerton, Wash.....	Aug. 10	Aug. 31	827	For repairs.
Drakes Bay.....	Sept. 3	Sept. 4	806	Anchored on account of fog.
San Francisco, Cal.....	Sept. 4	Sept. 7	21	To clean and paint ship.
Santa Monica, Cal.....	Sept. 8	Sept. 10	320	To celebrate Admission Day.
San Francisco, Cal.....	Sept. 11	Sept. 13	320	Ordered Mare Island.
Mare Island, Cal.....	Sept. 13	Oct. 25	13	For repairs.
California City, Cal.....	Oct. 25	Oct. 26	13	To coal ship.
San Francisco, Cal.....	Oct. 26	Oct. 28	13	Preparing for trip to Magdalena Bay.
Magdalena Bay, Mexico.....	Oct. 31	Dec. 2	1,012	Target practice.
Acapulco, Mexico.....	Dec. 6	Dec. 9	845	To coal ship.
Corinto, Nicaragua.....	Dec. 13		790	Duty as flagship of Rear-Admiral W. W. Kimball, commander Nicara-guan Expeditionary Squadron.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Corinto, Nicaragua	1910.	1910. Apr. 11	<i>Knots.</i>	Duty with Nicaraguan Expeditionary Squadron.
Panama, Panama	Apr. 14	Apr. 14	705	Conveying Admiral Kimball and staff to Panama.
San Francisco, Cal.	Apr. 28	May 15	3,281	To coal ship and give liberty.
Bremerton, Wash.	May 19	.....	819	Under repair.
Alert (gunboat) .....	.....	.....	.....	At the navy-yard, Mare Island, Cal.
[Returned to the Navy Department by the California Naval Militia Feb. 27, 1910.]	.....	.....	.....	.....
Alexander (collier) .....	.....	.....	.....	Collier service with the Asiatic Fleet until placed out of service at the naval station, Cavite.
[Placed out of service Apr. 15, 1910, at the naval station, Cavite, P. I.]	.....	.....	.....	.....
Allee (tug) .....	.....	.....	.....	At the navy-yard, Norfolk, Va.
Alliance (stationship), Commander GEORGE R. SALISBURY, commanding. Relieved by Lieut.-Commander CHARLES A. BRAND, Sept. 13, 1909.	.....	.....	.....	At the naval station, Culebra, V. I.
Alvarado (gunboat) .....	.....	.....	.....	Loaned to the Louisiana Naval Militia.
Ammen (destroyer) .....	.....	.....	.....	Under construction at the works of the New York Shipbuilding Co., Camden, N. J.
Amphitrite (monitor), Commander WILLIAM A. GILL, commanding. [Placed in commission in reserve June 14, 1910, at the navy-yard, Philadelphia, Pa.]	.....	.....	.....	At the end of the fiscal year the Amphitrite is under orders to proceed to St. Louis, Mo., where she will be assigned to duty for the instruction of the Naval Militia of Missouri.
Annapolis (gunboat), Capt. JOHN PARKER, retired, commanding.	.....	.....	.....	.....
	1909.	1909.	.....	.....
Pago Pago, Samoa .....	.....	July 27	.....	Station duty.
Apia, Samoa	July 28	July 29	93	For mail and provisions.
Pago Pago, Samoa	July 30	Aug. 6	88	Station duty.
Tau, Samoa	Aug. 7	Aug. 7	56	Island government.
Pago Pago, Samoa	Aug. 8	Oct. 15	60	Station duty.
Apia, Samoa	Oct. 15	.....do	90	Official visit.
Pago Pago, Samoa	Oct. 16	Oct. 16	80	Station duty.
Do	Oct. 17	.....	199	Searching for missing schooner.
	1910.	1910.	.....	.....
Pago Pago, Samoa .....	.....	Mar. 9	.....	Station ship at the naval station, Tutuila, Samoa.
Apia, Samoa	Mar. 10	Mar. 10	102	Do.
Pago Pago, Samoa	Mar. 11	Mar. 19	115	Do.
Leone, Samoa	Mar. 19	.....do	14	Do.
Pago Pago, Samoa .....	.....do	Apr. 5	14	Do.
Apia, Samoa	Apr. 6	Apr. 6	195	Do.
Pago Pago, Samoa	Apr. 7	May 31	110	Do.
Apia, Samoa	May 31	.....do	77	Do.
Pago Pago, Samoa	June 1	June 6	81	Do.
Manua, Samoa	June 7	June 7	89	Do.
Pago Pago, Samoa	June 8	June 18	86	Do.
Leone, Samoa	June 18	.....do	14	Do.
Pago Pago, Samoa .....	.....do	June 29	14	Do.
Manua, Samoa	June 30	June 30	90	Do.
Apache (tug) .....	.....	.....	.....	The Apache was assigned to duty at the navy-yard, New York, from the beginning of the fiscal year until Apr. 6, 1910. From Apr. 6, 1910, until May 1, 1910, the vessel was assigned to duty as tender to the Atlantic Fleet. From May 1, 1910, to May 9, 1910, the vessel was assigned to duty at the navy-yard, New York. On May 9, 1910, the Apache was detached from duty at the navy-yard, New York, and assigned to duty at the naval magazine, Iona Island, N. Y.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
			<i>Knots.</i>	
Arayat (gunboat), Lieut. - Commander MATT H. SIGNOR , commanding. Relieved by Ensign HARRY A. McCLURE Mar. 27, 1910. [Placed out of commission Apr. 11, 1910, at the naval station, Cavite, P. I.]				Cruising in the waters of the Southern Philippines suppressing piracy.
Arethusa (supply ship), Lieut.-Commander BION B. BIERER , commanding. Relieved by Lieut. HAYNE ELLIS , July 16, 1909. [Placed out of commission Oct. 15, 1909, at the navy-yard, Mare Island, Cal. Placed in service with a merchant complement Oct. 15, 1909, at the navy-yard, Mare Island, Cal.]				
	1910.	1910.		
Mare Island, Cal.		Jan. 5		Under repair.
San Francisco, Cal.	Jan. 5	Jan. 7	24	En route to Norfolk, Va.
Panama, Panama.	Jan. 21	Jan. 26	3,260	Do.
Coronel, Chile.	Feb. 7	Feb. 9	2,839	Do.
Rio de Janeiro, Brazil.	Feb. 25	Mar. 1	3,500	Do.
San Juan, Porto Rico.	Mar. 16	Mar. 21	3,802	Do.
Hampton Roads, Va.	Mar. 26	Mar. 29	1,257	
Norfolk, Va.	Mar. 29		10	Under repair.
Arkansas (battle ship).....				Under construction at the works of the New York Shipbuilding Co., Camden, N. J. At the navy-yard, Charleston, S. C.
Atlanta (barracks for torpedo men), Lieut. - Commander LOUIS C. RICHARDSON , commanding. Relieved by Lieut. JAMES W. HAYWARD , Oct. 16, 1909. Relieved by Lieut.-Commander FREDERIC N. FREEMAN , Nov. 9, 1909.				
Bagley (torpedo boat).....				At the Naval Academy, Annapolis, Md.
Balley (torpedo boat).....				At the navy-yard, Charleston, S. C.
[Placed in commission Nov. 7, 1909, at the navy-yard, Norfolk, Va. Placed in reserve Dec. 22, 1909, at the navy-yard, Charleston, S. C.]				
Bainbridge (destroyer), Ensign LLOYD W. TOWNSEND , commanding. Relieved by Ensign EDMUND S. ROOT , Apr. 4, 1910.				Attached to the Asiatic Torpedo Fleet.
Baltimore (cruiser, second class).....				At the navy-yard, Philadelphia, Pa.
Barney (torpedo boat).....				At the navy-yard, Charleston, S. C.
Barracuda (submarine).....				Under construction at the Union Iron Works, San Francisco, Cal. Attached to the Asiatic Torpedo Fleet.
Barry (destroyer), Ensign JOHN M. SMALLIE , commanding. Relieved by Ensign EDMUND S. ROOT , Dec. 30, 1909. Relieved by Ensign LLOYD W. TOWNSEND , Apr. 4, 1910.				
Beauntington (gunboat).....				At the navy-yard, Mare Island, Cal.
Biddle (torpedo boat), Ensign VAUGHN V. WOODWARD , commanding. [Placed in reserve Nov. 18, 1909, at the navy-yard, Charleston, S. C.]				At the navy-yard, Charleston, S. C.
Birmingham (scout cruiser), Commander WILLIAM L. HOWARD , commanding. Relieved by Commander WILLIAM B. FLETCHER , Oct. 28, 1909.				
	1909.	1909.		
Bradford, R. I.	July 2	July 4		To coal ship.
Newport, R. I.	July 4	July 6	8	For the Fourth of July.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1909.	1909.	<i>Knots.</i>	
Boston, Mass.....	July 6	Sept. 1	150	Under repair.
Provincetown, Mass.....	Sept. 1	Sept. 5	49	Calibration practice.
Hampton Roads, Va.....	Sept. 6	Sept. 9	492	Preparing for target practice.
Southern Drill Grounds.....	Sept. 9	Sept. 15	51	Target practice with Atlantic Fleet.
Hampton Roads, Va.....	Sept. 15	Sept. 20	51	Ordered to New York.
North River, New York City.....	Sept. 21	Oct. 1	294	For the Hudson-Fulton celebration.
Newburgh, N. Y.....	Oct. 1	Oct. 2	44	Duty in connection with the Hudson-Fulton celebration.
Poughkeepsie, N. Y.....	Oct. 2	Oct. 5	11	Do.
Tompkinsville, N. Y.....	Oct. 5	..do....	63	To receive draft and discharge Chester's target practice ammunition.
Boston, Mass.....	Oct. 6	Dec. 7	320	For repairs.
Provincetown, Mass.....	Dec. 7	Dec. 14	11	Carrying on wireless tests with the Brant Rock Wireless Station.
Hampton Roads, Va.....	Dec. 22		1,859	Rescued crew of disabled British tug Bulldog.
Do.....	1910.	1910.		Awaiting orders.
Norfolk, Va.....	Jan. 18	Feb. 4	11	Under repair.
Hampton Roads, Va.....	Feb. 4	Feb. 5	136	Started to assistance of the steamship Kentucky.
Norfolk, Va.....	Feb. 5	Feb. 19	11	Returned to yard for repairs.
Hampton Roads, Va.....	Feb. 19	Feb. 21	11	Awaiting orders.
Sewall Point, Va.....	Feb. 24	Feb. 25	618	Duty in connection with towing of targets.
Hampton Roads, Va.....	Feb. 25	Mar. 9	2	Awaiting orders.
Metomkin Inlet, Va.....	Mar. 9	..do....	73	Recovered dingy belonging to the Nina.
Hampton Roads, Va.....	..do.	Mar. 20	73	Preparing for backing tests.
Porto Grande, St. Vincent, Cape de Verde.	Mar. 28	Mar. 31	2,969	En route to Monrovia.
Monrovia, Liberia.....	Apr. 4	Apr. 12	922	Protecting American interests and investigating conditions in Liberia.
Cape Palmas, Liberia.....	Apr. 13	May 9	218	Do.
Monrovia, Liberia.....	May 10	May 10	219	Do.
St. Vincent, Cape de Verde.....	May 15	May 18	1,065	Returning to United States.
Hampton Roads, Va.....	May 29	May 30	2,974	Ordered to Philadelphia.
Philadelphia, Pa.....	May 31	June 29	244	To dock ship.
Portland, Me.....	June 30	.....	502	For the Fourth of July celebration.
Blakely (torpedo boat), Ensign REUBEN L. WALKER, commanding.				At the navy-yard, Charleston, S. C.
[Placed in reserve Nov. 9, 1909, at the navy-yard, Charleston, S. C.]				
Bonita (submarine), Ensign FREDERIC V. MCNAIR, commanding. Relieved by Ensign SLOAN DANENHOWER, Jan. 12, 1910.				Attached to the Atlantic Torpedo Fleet.
[Placed in commission Nov. 23, 1909, at the navy-yard, Boston, Mass.]				
Boston (cruiser, third class).....				At the navy-yard, Puget Sound, Wash.
Boxer (sailing ship).....				At the training station, Newport, R. I.
Brooklyn (cruiser, first class).....				At the navy-yard, Philadelphia, Pa.
Brutus (collier).....				Collier service on the Atlantic coast.
Buffalo (transport), Commander GUY W. BROWN, commanding. Relieved by Commander CLARENCE M. STONE, Mar. 21, 1910.				
Woozung, China.....	1909. July 3	1909. July 7		To discharge and receive drafts from the Third Squadron, Pacific Fleet.
Hongkong, China.....	July 10	July 13	833	To discharge drafts to Helena and Samar.
Cavite, P. I.....	July 16	July 17	1,020	To discharge draft of men to the naval station, Cavite.
Olongapo, P. I.....	July 17	July 18	58	To discharge draft of marines.
Cavite, P. I.....	July 18	July 25	58	To discharge and receive cargo.
Apra Harbor, Guam.....	July 30	Aug. 4	1,509	En route to United States.
Honolulu, Hawaii.....	Aug. 14	Aug. 23	3,337	Do.
San Francisco, Cal.....	Aug. 29	Aug. 30	2,100	Do.
Mare Island, Cal.....	Aug. 30	Oct. 28	27	For repairs.
California City, Cal.....	Oct. 28	Oct. 31	17	To coal ship.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Pichilnque Bay, Mexico.....	1909. Nov. 5	1909. Nov. 21	<i>Knots.</i> 1,335	Repairing coaling station.
Panama, Panama.....	Nov. 29	Dec. 17	2,240	To transport regiment of marines to Corinto.
Corinto, Nicaragua.....	Dec. 20		689	With Nicaraguan Expeditionary Squadron.
Corinto, Nicaragua.....	1910. Mar. 16	1910. Mar. 16		With Nicaraguan Expeditionary Squadron.
Panama, Panama.....	Mar. 19	Apr. 15	689	To disembark marines.
Magdalena Bay, Mexico.....	Apr. 24	Apr. 24	2,395	To disinter bodies of naval dead.
Do.....	Apr. 26	Apr. 30	289	To transfer target material.
San Francisco, Cal.....	May 4	May 5	992	En route Mare Island.
Mare Island, Cal.....	May 5		31	To dock ship.
Burrows (destroyer).....				Under construction at the works of the New York Shipbuilding Co., Camden, N. J.
Caesar (collier).....				The Caesar made a trip to the Philippines via the Suez Canal, and return, during the fiscal year. At the end of the fiscal year the vessel is engaged in collier service on the Atlantic coast.
California (armored cruiser), Capt. VINCENDON L. COTTMAN, commanding. Relieved by Capt. HENRY T. MAYO, Sept. 3, 1909.				
Mare Island, Cal.....	1909. July 24	1909. July 24		Repairs.
Hunter's Point, Cal.....	July 24	July 27	28	In dry dock.
Mare Island Light.....	July 27	Aug. 2	26	
Mare Island, Cal.....	Aug. 2	Aug. 14	3	Repairs.
San Francisco, Cal.....	Aug. 14	Aug. 15	28	With West Virginia, Maryland, and South Dakota.
Seattle, Wash.....	Aug. 18	Aug. 20	804	With First Squadron, Pacific Fleet.
Vashon Island, Wash.....	Aug. 20	do.	152	Standardization trials.
Seattle, Wash.....	do.	Aug. 28	8	With First Squadron, Pacific Fleet.
California City, Cal.....	Aug. 31	Sept. 1	806	To coal ship.
San Francisco, Cal.....	Sept. 1	Sept. 5	7	Preparing for the trip to the Philippines.
Honolulu, Hawaii.....	Sept. 10	Sept. 20	2,156	With First Squadron, Pacific Fleet.
Maialaea Bay, Hawaii.....	Sept. 20	Sept. 21	90	Coaling.
Off Maialaea Bay, Hawaii.....	Sept. 21	Sept. 22	120	Four-hour full power trial.
Hilo, Hawaii.....	Sept. 23	Sept. 24	114	With First Division, Pacific Fleet.
Honolulu, Hawaii.....	Sept. 25	Oct. 5	198	With First Squadron, Pacific Fleet.
Nares Harbor, Admiralty Islands.....	Oct. 17	Oct. 25	3,587	With Pacific Fleet; coaling.
Manila, P. I.....	Oct. 30	Nov. 4	1,952	With Pacific Fleet: liberty.
Cavite, P. I.....	Nov. 4	Nov. 7	4	Coaling.
Olongapo, P. I.....	Nov. 7	Nov. 9	61	Preliminary mine practice.
Manila Bay, P. I.....	Nov. 9	Nov. 10	52	Day and night subcaliber practice
Olongapo, P. I.....	Nov. 10	Nov. 12	57	Calibration practice.
Manila Bay, P. I.....	Nov. 12	Nov. 20	53	Night record battle practice.
Olongapo, P. I.....	Nov. 20	Dec. 6	57	Day battle practice.
Manila, P. I.....	Dec. 6	Dec. 10	63	To give liberty.
Yokohama, Japan.....	Dec. 15	Dec. 30	1,751	With South Dakota.
Woozung, China.....	1910. Jan. 3	1910. Jan. 14	1,150	To coal ship, give liberty, etc.
Yokohama, Japan.....	Jan. 17	Jan. 20	1,026	Do.
Honolulu, Hawaii.....	Jan. 31	Feb. 8	3,462	With Pacific Fleet.
San Francisco, Cal.....	Feb. 14	Feb. 23	2,111	Do.
California City, Cal.....	Feb. 23	Feb. 24	7	To coal ship.
San Francisco, Cal.....	Feb. 24	Mar. 1	7	To give liberty.
Santa Barbara, Cal.....	Mar. 2	Mar. 7	293	Preparing for target practice.
Santa Rosa Island, Cal.....	Mar. 7	Mar. 11	28	Do.
Santa Barbara, Cal.....	Mar. 11	Mar. 14	28	Do.
Santa Barbara Channel, Cal.....	Mar. 14	do.	18	Do.
Santa Barbara, Cal.....	do.	Mar. 15	17	Do.
Santa Cruz Island, Cal.....	Mar. 15	Mar. 18	25	Do.
Santa Barbara, Cal.....	Mar. 18	Mar. 22	25	Do.
Santa Rosa Island, Cal.....	Mar. 22	Mar. 23	28	Do.
Santa Barbara, Cal.....	Mar. 23	Mar. 24	28	Do.
Santa Barbara Channel, Cal.....	Mar. 24	do.	15	Do.
Santa Barbara, Cal.....	do.	Mar. 27	15	Do.
Santa Rosa Island, Cal.....	Mar. 27	Mar. 28	45	Do.
Target range, off Santa Barbara, Cal.....	Mar. 29	Apr. 2		Target practice.
Santa Rosa Island.....	Apr. 2	Apr. 3	525	Do.
Off Santa Barbara, Cal.....	Apr. 3	do.	317	Standardization runs.
Santa Cruz, Cal.....	Apr. 4	Apr. 6		Record mine practice.
California City, Cal.....	Apr. 6	Apr. 7	85	En route Mare Island.
Mare Island, Cal.....	Apr. 7			Under repairs.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
			<i>Knots.</i>	
Callao (gunboat), Ensign ROY C. SMITH, commanding. Relieved by Ensign CLAUDE A. BONVILLIAN, July 31, 1909. Relieved by Ensign JOE R. MORRISON, Dec. 24, 1909.				Chinese river service.
Carp (submarine)				Under construction at the Union Iron Works, San Francisco, Cal.
Castine (tender to submarines), Commander GEORGE W. KLINE, commanding. Relieved by Lieut. RALPH A. KOCH, Jan. 11, 1910.	1909.	1909.		
Newport, R. I.	July 8	July 8		Parent ship for submarines.
Bradford, R. I.	July 8	do.	7	For coal.
Newport, R. I.	do.	July 9	7	Parent ship for submarines.
Provincetown, Mass.	July 10	Aug. 6	115	Do.
Newport, R. I.	Aug. 8	Aug. 31	115	Do.
Bradford, R. I.	Aug. 31	Sept. 10	7	Do.
Newport, R. I.	Sept. 10	Sept. 15	7	Do.
Oyster Bay, N. Y.	Sept. 16	Sept. 19	112	Do.
Navy-yard, New York.	Sept. 19	Sept. 25	38	Do.
North River, New York City.	Sept. 25	Sept. 29	16	With submarines for duty in connection with the Hudson-Fulton celebration.
Tarrytown, N. Y.	Sept. 29	Sept. 30	19	Do.
Ossining, N. Y.	Sept. 30	Oct. 1	5	Do.
Newburgh, N. Y.	Oct. 1	Oct. 2	24	Duty in connection with the Hudson-Fulton celebration.
Poughkeepsie, N. Y.	Oct. 2	Oct. 5	12	Do.
New York City.	Oct. 5	Oct. 22	70	Parent ship to submarines.
Delaware Breakwater	Oct. 24	Oct. 30	225	Do.
Hampton Roads, Va.	Oct. 31	Nov. 1	149	Do.
Charleston, S. C.	Nov. 4	Nov. 7	394	Do.
Hampton Roads, Va.	Nov. 9	Nov. 26	394	Do.
Charleston, S. C.	Nov. 29	Dec. 2	391	Do.
Newport, R. I.	Dec. 5	Dec. 11	740	Do.
New York, N. Y.	Dec. 12	do.	146	Do.
	1910.	1910.		
New York, N. Y.	Feb. 2	Feb. '1		En route to Provincetown.
Provincetown, Mass.	Feb. 2	Feb. 3	247	Order to Boston.
Boston, Mass.	Feb. 3	Feb. 12	49	Ordered to search for the Nina.
Provincetown, Mass.	Feb. 12	Feb. 13	49	Searching for the Nina.
Edgartown, Mass.	Feb. 13	Feb. 14	79	Do.
Newport, R. I.	Feb. 14	Feb. 15	93	Do.
Bradford, R. I.	Feb. 15	do.	7	To coal ship.
Newport, R. I.	do.	do.	7	Searching for the Nina.
Boston, Light, Mass.	do.	Feb. 16	143	Do.
Boston, Mass.	Feb. 16	June 20	14	Tender to submarines.
New York, N. Y.	June 24	June 25	293	Towing derrick to New York.
Newport, R. I.	June 25	June 27	135	Making passage.
Bradford, R. I.	June 27	do.	7	For coal.
Boston, Mass.	June 28	June 29	177	Tender to submarines.
Provincetown, Mass.	June 29	do.	47	Towing Severn to Provincetown.
Celtic (supply ship), Commander HARRY McL. P. HUSE, commanding. Relieved by Commander GEORGE F. COOPER, Dec. 21, 1909. Relieved by Lieut. AUBREY K. SHOUR, June 16, 1910.	1909.	1909.		
Hampton Roads, Va.	July 3	July 1		Supply ship to the Atlantic Fleet.
Provincetown, Mass.	July 3	Aug. 4	453	Do.
Hampton Roads, Va.	Aug. 6	Aug. 14	432	Do.
Southern Drill Grounds	Aug. 14	Aug. 23	50	Do.
Navy-yard, New York.	Aug. 24	Aug. 30	235	Do.
Southern drill grounds.	Aug. 31	Sept. 11	234	Do.
Hampton Roads, Va.	Sept. 11	Sept. 20	50	Do.
Tompkinsville, N. Y.	Sept. 22	Sept. 27	233	Do.
Navy-yard, New York.	Sept. 27	do.	10	Do.
	1910.	1910.		
Navy-yard, New York.	Jan. 13	Jan. 8		Loading cargo.
Guantanamo Bay, Cuba.	Jan. 13	Feb. 27	1,317	Supply ship to the Atlantic Fleet.
Navy-yard, New York.	Mar. 4	Mar. 28	1,357	Loading cargo.
Hampton Roads, Va.	Mar. 29	Apr. 28	287	Supply ship to the Atlantic Fleet.
Boston, Mass.	Apr. 30	June 29	339	Under repair.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Charleston (cruiser, first class), Commander HARRY S. KNAPP, commanding. Relieved by Com- mander JOHN H. GIBBONS, July 21, 1909.				
	1909.	1909.	<i>Knots.</i>	
Woosung, China.....	July 2	July 8	.....	Transfers to and from the Buffalo.
Nanking, China.....	July 9	July 16	197	Cruising with Third Squadron.
Woosung, China.....	July 17	July 22	197	Do.
Tsingtau, China.....	July 24	July 29	420	Do.
Chefoo, China.....	July 30	Aug. 19	240	Maneuvers with Third Squadron.
Wethaiwei, China.....	Aug. 20	Aug. 23	54	Cruising with Third Squadron.
Chingwangtao, China.....	Aug. 24	Aug. 30	190	Do.
Dalny, Manchuria.....	Aug. 31	Sept. 8	130	Do.
Hongkong, China.....	Sept. 14	Sept. 20	1,315	Do.
Cavite, P. I.....	Sept. 23	Sept. 28	630	Do.
Olongapo, P. I.....	Sept. 28	Sept. 30	65	To dock ship.
Cavite, P. I.....	Sept. 30	Oct. 11	65	Cruising with Third Squadron.
Olongapo, P. I.....	Oct. 11	Oct. 19	65	Do.
Cavite, P. I.....	Oct. 19	Oct. 27	65	Do.
Olongapo, P. I.....	Oct. 28	Oct. 28	65	Do.
Cavite, P. I.....	do	Nov. 8	65	Do.
Target range, Manila Bay, P. I.....	Nov. 8	do	.....	Preparing for target practice.
Cavite, P. I.....	do	Nov. 9	.....	Do.
Target range, Manila Bay, P. I.....	Nov. 9	do	.....	Do.
Cavite, P. I.....	do	Nov. 10	.....	Do.
Manila, P. I.....	Nov. 10	Nov. 12	.....	Do.
Cavite, P. I.....	Nov. 12	Nov. 14	.....	Do.
Target range, Manila Bay, P. I.....	Nov. 14	do	.....	Do.
Cavite, P. I.....	Nov. 15	Nov. 17	.....	Do.
Target range, Manila Bay, P. I.....	Nov. 17	do	.....	Target practice.
Cavite, P. I.....	Nov. 18	Nov. 18	.....	Do.
Fleet rendezvous.....	do	Nov. 20	.....	Do.
Olongapo, P. I.....	Nov. 21	Nov. 21	.....	Do.
Target range, Manila Bay, P. I.....	do	do	.....	Do.
Olongapo, P. I.....	do	Nov. 22	.....	Do.
Target range, Manila Bay, P. I.....	Nov. 22	do	60	Do.
Olongapo, P. I.....	do	Nov. 23	60	Do.
Target range, Olongapo, P. I.....	Nov. 23	do	.....	Do.
Olongapo, P. I.....	do	Nov. 26	.....	Do.
Target range, Olongapo, P. I.....	Nov. 26	do	.....	Do.
Olongapo, P. I.....	do	Nov. 27	.....	Making passage.
Cavite, P. I.....	Nov. 27	Dec. 26	65	.....
	1910.	1910.		
Yokohama, Japan.....	Jan. 21	Jan. 21	.....	Cruising.
Cavite, P. I.....	Jan. 27	Feb. 3	1,434	Do.
Manila, P. I.....	Feb. 3	Feb. 16	8	Do.
Cavite, P. I.....	Feb. 16	Mar. 9	8	Do.
Olongapo, P. I.....	Mar. 9	Mar. 27	65	Preparing for and holding target practice.
Cavite, P. I.....	Mar. 28	Mar. 28	65	.....
Olongapo, P. I.....	do	Apr. 1	65	To dock ship.
Cavite, P. I.....	Apr. 1	Apr. 4	65	Preparing for cruise.
Hongkong, China.....	Apr. 7	Apr. 13	630	Cruising on station.
Amoy, China.....	Apr. 14	Apr. 25	285	Do.
Woosung, China.....	Apr. 27	May 28	561	Do.
Yokohama, Japan.....	May 28	June 8	1,044	Do.
Kobe, Japan.....	June 9	June 18	359	Do.
Nagasaki, Japan.....	June 19	June 25	588	Do.
Chefoo, China.....	June 27	.....	574	Do.
Chattanooga (cruiser, third class), Commander JOHN M. ORCHARD, commanding. Relieved by Com- mander JOHN D. McDONALD, July, 21, 1909.				
	1909.	1909.		
Woosung, China.....	July 3	July 3	.....	Cruising alone.
Shanghai, China.....	do	July 5	15	Do.
Woosung, China.....	July 5	July 8	18	Do.
Nanking, China.....	July 9	July 12	197	With squadron.
Kinkiang, China.....	July 13	July 15	291	With Cleveland.
Hankow, China.....	July 15	July 18	142	Do.
Woosung, China.....	July 21	July 22	600	Do.
Tsingtau, China.....	July 24	July 29	306	With squadron.
Chefoo, China.....	July 30	Aug. 20	230	Do.
Wethaiwei, China.....	Aug. 20	Aug. 23	40	Do.
Chingwangtao, China.....	Aug. 24	Aug. 30	188	Do.
Dalny, China.....	Aug. 31	Sept. 8	134	Do.
Chefoo, China.....	Sept. 9	Sept. 9	90	Do.
Woosung, China.....	Sept. 11	Sept. 14	460	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1909.	1909.	<i>Knots.</i>	
Cavite, P. I.	Sept. 20	Oct. 11	1,130	Cruising alone.
Olongapo, P. I.	Oct. 11	Oct. 19	60	On calibration range and in dry dock.
Cavite, P. I.	Oct. 19	Nov. 25	60	Target practice on target range in Manila Bay.
Olongapo, P. I.	Nov. 25	Dec. 6	60	On target range in Subic Bay.
Cavite, P. I.	Dec. 7		60	
	1910.	1910.		
Cavite, P. I.	Jan. 10	Jan. 10		In dry dock Jan. 11, 1910.
Olongapo, P. I.	Jan. 10	Jan. 21	65	Cruising.
Cavite, P. I.	Jan. 21	Jan. 26	65	Cruising on patrol duty.
Casiguran Bay	Jan. 30	Jan. 31	660	Do.
Do.	Jan. 31	Feb. 4	90	Do.
Port Lampon	Feb. 4	Feb. 9	105	Do.
Do.	Feb. 9	Feb. 13	60	Do.
Casiguran Bay	Feb. 13	Feb. 19	105	Do.
Do.	Feb. 19	Feb. 22	110	Do.
Do.	Feb. 22	Feb. 26	110	Do.
Port Lampon	Feb. 26	Feb. 27	105	Do.
Casiguran Bay	Feb. 27	Feb. 28	105	Do.
Olongapo, P. I.	Mar. 3	Mar. 9	600	Do.
Do.	Mar. 9	Mar. 10	50	Engaged in and preparing for target practice.
Do.	Mar. 10	Mar. 11	50	Do.
Do.	Mar. 11	Mar. 15	55	Do.
Do.	Mar. 15	Mar. 17	60	Do.
Do.	Mar. 17	Mar. 20	40	Do.
Do.	Mar. 25	Mar. 26	560	Do.
Do.	Mar. 28	Mar. 29	180	Do.
Do.	Mar. 30	Mar. 31	100	Do.
Cavite, P. I.	Mar. 31	Apr. 4	65	Cruising alone.
Hongkong, China.	Apr. 7	Apr. 13	632	Cruising on station.
Amoy, China.	Apr. 14	Apr. 19	289	Do.
Hait-tau Bay, China.	Apr. 19	Apr. 28	399	Do.
Bonham Straits, China.	Apr. 30	May 2	462	Do.
Woozung, China.	May 2	May 12	76	Do.
Amoy, China.	May 15	May 15	508	Do.
Cavite, P. I.	May 18	May 30	665	Ordered home.
Guam, Midway Islands	June 5	June 6	1,487	En route to the United States in company with the Cleveland.
Honolulu, Hawaii.	June 21		3,343	Do.
Chauncey (destroyer), Ensign LAURANCE N. McNAIR, commanding.				Attached to the Asiatic Torpedo Fleet.
Chester (scout cruiser), Commander HENRY B. WILSON, commanding. Relieved by Commander WILLIAM R. SNOE-MAKER, Dec. 3, 1909.				
	1909.	1909.		
Bradford, R. I.	July 2	July 4		For coal.
Newport, R. I.	July 4	July 6	7	For celebration.
Navy-yard, New York	July 6	July 31	157	To dock ship.
Off Gay Head Light.	July 31	Aug. 1	166	En route Gloucester.
Gloucester, Mass.	Aug. 1	Aug. 7	132	For celebration.
Navy-yard, New York	Aug. 9	Nov. 22	301	For repairs.
Sandy Hook, N. Y.	Nov. 22	Nov. 23	18	En route Chester, Pa.
Delaware Breakwater.	Nov. 23	Nov. 24	151	Do.
Deep Water Point, Del.	Nov. 24	Nov. 27	57	Do.
Chester, Pa.	Nov. 27	Dec. 1	14	For celebration.
Hampton Roads, Va.	Dec. 2	Dec. 7	242	For duty with Atlantic Fleet.
Guantanamo Bay, Cuba.	Dec. 10		1,118	For winter cruise.
	1910.	1910.		
Guantanamo Bay, Cuba	Jan. 12	Jan. 12		With Atlantic Fleet engaged in drills and exercises.
Cape Cruz, Cuba.	Jan. 13	Jan. 14	207	Do.
Guantanamo Bay, Cuba.	Jan. 15	Jan. 16	239	Do.
Cape Cruz, Cuba.	Jan. 17	Jan. 21	162	Do.
Guantanamo Bay, Cuba.	Jan. 22	Feb. 2	179	Do.
Buenza Esperanza Shoals.	Feb. 3	Feb. 9	197	Do.
Guantanamo Bay, Cuba.	Feb. 10	Feb. 15	198	Do.
Navy-yard, New York	Feb. 18	Mar. 27	1,307	For repairs and for fitting out for trip to South America.
Hampton Roads, Va.	Mar. 28	Mar. 31	290	For backing tests.
Do.	Apr. 2	Apr. 3	72	For mail.
Boston, Mass.	Apr. 4	Apr. 8	518	For coal and motor boat.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Habana, Cuba.....	1910. Apr. 12	1910. Apr. 14	<i>Knots.</i> 1,406	With the Special Service Squadron en route to Buenos Aires for the Argentine Centennial.
St. Thomas, Danish West Indies.....	Apr. 17	Apr. 18	1,048	Do.
Trinidad, British West Indies.....	Apr. 20	Apr. 22	514	Do.
Off Natal, Brazil.....	Apr. 29	May 1	2,074	Do.
Maldonado, Uruguay.....	May 8	May 9	2,158	Do.
Montevideo, Uruguay.....	May 9	May 11	58	Do.
Buenos Aires, Argentine.....	May 12	May 12	121	For the Argentine Centennial celebration.
Montevideo, Uruguay.....	May 13	May 14	121	Do.
Bahia Blanca, Argentine.....	May 15	May 17	469	Do.
La Plata, Argentine.....	May 18	May 21	516	Do.
Buenos Aires, Argentine.....	May 21	June 6	30	Do.
Montevideo, Uruguay.....	June 7	June 14	120	En route to United States.
Rio de Janeiro, Brazil.....	June 17	June 30	1,037	Do.
Cheyenne (monitor), Commander JOHN J. KNAPP, commanding.				At the navy-yard, Mare Island, Cal. during the fiscal year.
[Placed out of commission Nov. 13, 1909, at the navy-yard, Mare Island, Cal.]				
Chicago (cruiser, second class), Commander WILLIAM H. G. BULLARD, commanding. Relieved by Commander JOHN HOOD, Aug. 28, 1909. Relieved by Lieut. Commander JOHN L. STICHT, Mar. 9, 1910.				
Placed in reserve Aug. 28, 1909, at the Naval Academy, Annapolis, Md. Placed in commission in reserve at the navy-yard, Boston, Mass., and assigned to duty with the Massachusetts Naval Militia Jan. 23, 1910.]				
	1909.	1909.		
New London, Conn.....	July 2	July 2		Naval Academy Practice Squadron.
Fishers Island, N. Y.....	July 2	do	12	Do.
New London, Conn.....	do	July 6	8	Do.
Gardiners Bay.....	July 6	July 9	19	Do.
New London, Conn.....	July 9	July 12	18	Do.
Gardiners Bay.....	July 12	July 16	19	Do.
New London, Conn.....	July 16	July 19	20	Do.
Gardiners Bay.....	July 19	July 23	19	Do.
New London, Conn.....	July 23	July 26	19	Do.
Bradford, R. I.....	July 26	July 27	50	Do.
Jamestown, R. I.....	July 27	July 29	7	Do.
Boston, Mass.....	July 30	Aug. 3	255	Do.
Gloucester, Mass.....	Aug. 3	Aug. 5	28	Do.
Portsmouth, N. H.....	Aug. 5	Aug. 7	38	Do.
Portland, Oreg.....	Aug. 7	Aug. 10	50	Do.
Bath, Me.....	Aug. 10	Aug. 15	40	Do.
Bar Harbor, Me.....	Aug. 16	Aug. 18	108	Do.
Bradford, R. I.....	Aug. 19	Aug. 20	381	Do.
Jamestown, R. I.....	Aug. 20	Aug. 23	6	Do.
Solomons Island, Md.....	Aug. 25	Aug. 26	450	Do.
Annapolis, Md.....	Aug. 26		43	To disembark midshipmen and to go in reserve.
	1910.	1910.		
Annapolis, Md.....	Jan. 7	Jan. 4		In reserve.
Philadelphia, Pa.....	Jan. 7	Jan. 20		En route to Boston.
Boston, Mass.....	Jan. 23			In reserve.
Chickasaw (tug).....				At the training station, Newport, R. I.
Choctaw (tug).....				At the navy-yard, Washington, D. C.
Cincinnati (cruiser, third class).....				At the navy-yard, Mare Island, Cal.
Cleveland (cruiser, third class), Commander HUGH RODMAN, commanding.				
	1909.	1909.		
Woozung, China.....	July 2	July 8		Cruising on the Yang-tze River.
Nanking, China.....	July 9	July 12	197	Do.
Kinkiang, China.....	July 13	July 15	246	Do.
Hankow, China.....	July 15	July 18	146	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1909.	1909.	<i>Knots.</i>	
Woosung, China.....	July 20	July 22	589	Cruising with Third Squadron.
Tsingtau, China.....	July 24	July 29	413	Do.
Chefoo, China.....	July 30	Aug. 19	235	Do.
Weihaiwei, China.....	Aug. 20	Aug. 23	42	Do.
Chinwangtao, China.....	Aug. 24	Aug. 30	187	Do.
Daini, Manchuria.....	Aug. 31	Sept. 8	143	Do.
Chefoo, China.....	Sept. 9	Sept. 9	85	Do.
Hongkong, China.....	Sept. 14	Sept. 20	1,300	Do.
Cavite, P. I.....	Sept. 23	Oct. 8	640	Do.
Olongapo, P. I.....	Oct. 8	Oct. 22	67	To dock ship.
Cavite, P. I.....	Oct. 22	Nov. 1	67	Preparing for target practice.
Olongapo, P. I.....	Nov. 1	Nov. 6	67	Do.
Cavite, P. I.....	Nov. 6	Nov. 14	67	Do.
Target range, Manila Bay, P. I.....	Nov. 14	Nov. 21	14	Do.
Cavite, P. I.....	Nov. 21	Nov. 24	14	Do.
Corregidor Island, P. I.....	Nov. 24	Nov. 25	40	Do.
Olongapo, P. I.....	Nov. 25	Dec. 6	27	Target practice.
Target range, Manila Bay, P. I.....	Dec. 7	Dec. 8	32	Do.
Manila, P. I.....	Dec. 9	Dec. 10	14	Do.
Cavite, P. I.....	Dec. 10	Dec. 12	7	To coal ship.
Nimrod Sound, China.....	Dec. 16	Dec. 21	1,020	Target practice.
Woosung, China.....	Dec. 21	Dec. 22	135	Acting singly.
Shanghai, China.....	Dec. 22	Dec. 22	16	Do.
	1910.	1910.		
Shanghai, China.....	Jan. 13	Jan. 13		Cruising.
Olongapo, P. I.....	Jan. 17	Jan. 27	1,122	Preparing for and holding target practice.
Cavite, P. I.....	Jan. 28	Feb. 1	67	Do.
Olongapo, P. I.....	Feb. 1	Feb. 2	67	Do.
Cavite, P. I.....	Feb. 2	Feb. 3	67	Do.
Manila, P. I.....	Feb. 3	Feb. 16	10	Do.
Cavite, P. I.....	Feb. 16	Mar. 1	10	Do.
Subig Bay, P. I.....	Mar. 1	Mar. 21	67	Do.
Off northwest coast of Luzon, P. I.....	Mar. 21	Mar. 24		Do.
Olongapo, P. I.....	Mar. 26	Mar. 26		Do.
Off northwest coast of Luzon, P. I.....	do.	Mar. 28		Do.
Olongapo, P. I.....	Mar. 28	Mar. 29		Do.
Off northwest coast of Luzon, P. I.....	Mar. 29	Mar. 30		Do.
Olongapo, P. I.....	Mar. 30	do.		Do.
Cavite, P. I.....	Mar. 31	May 30	67	
Guam, Midway Islands.....	June 5	June 6		En route to Mare Island to be placed out of commission.
Honolulu, Hawaii.....	June 21			Do.
Colorado (armed cruiser), Capt. CHARLES B. T. MOORE, commanding. Relieved by Lieut. Commander BION B. BIERER, Nov. 26, 1909. Relieved by Capt. VALENTINE S. NELSON, Dec. 26, 1909.				
	1909.	1909.		
Bremerton, Wash.....		Aug. 18		Repairs.
Seattle, Wash.....	Aug. 18	Aug. 25	18	For duty in connection with exposition.
Do.....	Aug. 25	Aug. 26	40	Standardization runs.
Do.....	Aug. 26	Aug. 28	110	Do.
Mare Island Light, Cal.....	Aug. 31	Sept. 2	807	To coal ship.
San Francisco, Cal.....	Sept. 2	Sept. 10	27	Preparing for the trip to the Asiatic station.
Honolulu, Hawaii.....	Sept. 10	Oct. 5	2,080	With Pacific Fleet.
Nares Harbor, Admiralty Islands.....	Oct. 17	Oct. 25	3,648	To coal ship.
Manila, P. I.....	Oct. 30	Nov. 4	1,910	To give liberty.
Cavite, P. I.....	Nov. 4	Nov. 8		Preparing for target practice and target practice.
Olongapo, P. I.....	Nov. 8	Nov. 11		Do.
Manila Bay, P. I.....	Nov. 11	Nov. 20		Do.
Olongapo, P. I.....	Nov. 20	Dec. 2		To dock ship.
Cavite, P. I.....	Dec. 2	Dec. 5		To coal ship.
Olongapo, P. I.....	Dec. 5	Dec. 6		Division battle practice.
Manila, P. I.....	Dec. 6	Dec. 10		To give liberty.
Kobe, Japan.....	Dec. 15	Dec. 18	1,825	Cruising.
Nagasaki, Japan.....	Dec. 19	Dec. 30	420	Do.
	1910.	1910.		
Woosung, China.....	Jan. 1	Jan. 14	465	To give liberty.
Yokohama, Japan.....	Jan. 17	Jan. 20	1,051	Coaled ship.
Honolulu, Hawaii.....	Jan. 31	Feb. 8	3,553	With Pacific Fleet.
San Francisco, Cal.....	Feb. 14	Feb. 24	2,080	To give liberty.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
Mare Island Light, Cal.....	Feb. 24	Feb. 26	23	To receive stores.
San Francisco, Cal.....	Feb. 26	Mar. 1	23	To give liberty.
Santa Barbara, Cal.....	Mar. 2	Mar. 7	290	Preparing for target practice.
Santa Rosa Island, Cal.....	Mar. 7	Mar. 8	26	Do.
Santa Cruz Island, Cal.....	Mar. 8	Mar. 12	8	Do.
Santa Barbara, Cal.....	Mar. 12	Mar. 15	26	Do.
Santa Cruz Island, Cal.....	Mar. 15	Mar. 17	140	Do.
San Francisco, Cal.....	Mar. 18	Mar. 22	302	To coal ship.
Santa Barbara, Cal.....	Mar. 23	Mar. 27	302	Preparing for target practice.
Santa Rosa Island, Cal.....	Mar. 27	Apr. 1	51	Held record target practice.
Do.....	Apr. 3	Apr. 3	200	Do.
Bremerton, Wash.....	Apr. 7	.....	1,064	Under repair.
Columbia (cruiser, second class).....	.....	.....	.....	At the navy-yard, Philadelphia, Pa.
Concord (gunboat), Lieut. Commander FRANK H. SCHOFIELD, commanding. [Placed out of commission Nov. 4, 1909, at the navy-yard, Puget Sound, Wash.]	.....	.....	.....	.....
	1909.	1909.	.....	.....
Apra Harbor, Guam.....	.....	Sept. 10	.....	Station ship at Guam during the absence of the Supply.
Honolulu, Hawaii.....	Sept. 25	Sept. 30	3,340	En route to Bremerton to be placed out of commission.
Bremerton, Wash.....	Oct. 11	.....	2,211	Do.
Connecticut (battle ship), Capt. WALTER C. COWLES, commanding. Relieved by Capt. ALBERT W. GRANT, Nov. 1, 1909. Relieved by Capt. WILLIAM R. RUSH, Mar. 19, 1910.	.....	.....	.....	.....
	1909.	1909.	.....	.....
Boston, Mass.....	July 2	July 7	.....	For the Fourth of July.
Cape Cod Bay.....	July 7	Aug. 4	84	Preparing for target practice.
Hampton Roads, Va.....	Aug. 7	Aug. 11	673	En route to target grounds.
Southern drill grounds.....	Aug. 11	Sept. 12	55	Target practice.
Hampton Roads, Va.....	Sept. 12	Sept. 20	58	Ordered to New York.
Ambrose Lightship.....	Sept. 21	Sept. 22	261	En route to New York.
North River, New York City.....	Sept. 22	Oct. 9	12	With the battle ships of the Atlantic Fleet for the Hudson-Fulton celebration.
Tompkinsville, N. Y.....	Oct. 9	Oct. 11	6	Under repair.
Navy-yard, New York.....	Oct. 11	Nov. 23	6	Under repair.
Tompkinsville, N. Y.....	Nov. 28	Nov. 30	6	En route southern drill grounds.
Southern drill grounds.....	Dec. 1	Dec. 4	238	Drills and exercises in company with Atlantic Fleet.
Hampton Roads, Va.....	do.	Dec. 6	31	Do.
Southern drill grounds.....	Dec. 6	Dec. 10	31	Do.
Hampton Roads, Va.....	Dec. 10	Dec. 14	31	Do.
Southern drill grounds.....	Dec. 14	Dec. 16	31	Do.
Hampton Roads, Va.....	Dec. 16	Dec. 20	31	Do.
Ambrose Channel Light-ship.....	Dec. 21	Dec. 22	273	En route to New York City with fleet.
North River, New York City.....	Dec. 22	.....	.....	With fleet to give liberty.
	1910.	1910.	.....	.....
North River, New York City.....	.....	Jan. 7	.....	Flagship of the Atlantic Fleet.
Guantanamo Bay, Cuba.....	Jan. 12	Mar. 24	1,360	With Atlantic Fleet engaged in maneuvers, exercises, etc.
Hampton Roads, Va.....	Mar. 28	Apr. 4	1,122	Flagship of Atlantic Fleet.
Southern drill grounds.....	Apr. 4	Apr. 11	35	Preparing for target practice.
Hampton Roads, Va.....	Apr. 11	Apr. 15	42	Bore-sighting.
Southern drill grounds.....	Apr. 15	Apr. 27	36	With Atlantic Fleet engaged in target practice.
Navy-yard, New York.....	Apr. 28	.....	255	Under repair.
Constellation (stationary training ship), Commander WILLIAM F. FULLAM, commanding. Relieved by Commander PATRICK W. HOBURGAN, Dec. 30, 1909.	.....	.....	.....	At the training station, Newport, R. I.
Constitution (sailing ship).....	.....	.....	.....	At the navy-yard, Boston, Mass.
Craven (torpedo boat).....	.....	.....	.....	At the navy-yard, Charleston, S. C.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Culgoa (supply ship), Commander HARRY PHELPS, commanding.	1900.	1900.	Knots.	
Navy-yard, New York.....	.....	Aug. 5	.....	Undergoing repairs and completing cargo.
Hampton Roads, Va.....	Aug. 6	Aug. 13	281	Supply ship to Atlantic Fleet.
Southern drill grounds.....	Aug. 13	Sept. 12	51	Do.
Hampton Roads, Va.....	Sept. 12	Sept. 20	51	Do.
Tompkinsville, N. Y.....	Sept. 21	Sept. 26	271	Awaiting orders.
Navy-yard, New York.....	Sept. 26	.....	.....	Under repair.
	1910.	1910.		
Navy-yard, New York.....	.....	Feb. 12	.....	Under repair.
Tompkinsville, N. Y.....	Feb. 16	Feb. 17	860	Search for Nina.
Guantanamo Bay, Cuba.....	Feb. 26	Mar. 24	1,398	Towing targets to Guantanamo for use of Atlantic Fleet during target practice.
Hampton Roads, Va.....	Mar. 28	Apr. 6	1,079	Supply ship to Atlantic Fleet.
Southern drill grounds.....	Apr. 6	Apr. 7	29	Carrying mail for the Atlantic Fleet.
Hampton Roads, Va.....	Apr. 7	Apr. 8	29	Do.
Southern drill grounds.....	Apr. 8	Apr. 9	29	Towing target.
Hampton Roads, Va.....	Apr. 9	Apr. 10	29	Carrying mail for the Atlantic Fleet.
Southern drill grounds.....	Apr. 10	Apr. 11	29	Do.
Hampton Roads, Va.....	Apr. 11	Apr. 14	31	Towing target.
Southern drill grounds.....	Apr. 14	Apr. 17	31	Do.
Sewall Point, Va.....	Apr. 18	Apr. 18	31	Do.
Southern drill grounds.....	Apr. 19	Apr. 27	31	Do.
Boston, Mass.....	Apr. 29	.....	463	For docking and repairs.
Cumberland (sailing ship).....	.....	.....	.....	At the training station, Newport, R. I.
Cuttlefish (submarine), Ensign SIMEON B. SMITH, commanding. Relieved by Lieut. FREDERICK V. McNAIR, Apr. 4, 1910.	.....	.....	.....	Attached to the Atlantic Torpedo Fleet.
[Placed in reserve Nov. 30, 1909, at the navy-yard, Charleston, S. C. Placed in full commission Apr. 15, 1910, at the navy-yard, Charleston, S. C.]	.....	.....	.....
Cyclops (collier).....	.....	.....	.....	Under construction at the works of William Cramp & Sons, Philadelphia, Pa.
Dahlgren (torpedo boat).....	.....	.....	.....	At the navy-yard, Charleston, S. C.
Dale (destroyer), Lieut. HERBERT H. MICHAEL, commanding. Relieved by Ensign FRANK J. FLETCHER, Apr. 4, 1910.	.....	.....	.....	Attached to the Asiatic Torpedo Fleet.
Davis (torpedo boat), Ensign WILLIAM A. GLASSFORD, commanding. Relieved by Ensign EARL R. SHIPP, Aug. 9, 1909.	.....	.....	.....	At the navy-yard, Mare Island, Cal.
[Placed in reserve Oct. 28, 1909, at the navy-yard, Mare Island, Cal.]	.....	.....	.....
Decatur (destroyer), Ensign CARROLL S. GRAVES, commanding.	.....	.....	.....	Attached to the Asiatic Torpedo Fleet.
[Placed in commission in reserve Apr. 22, 1910, at the naval station, Olongapo, P. I.]	.....	.....	.....
Delaware (battle ship), Capt. CHARLES A. GOVE, commanding.	.....	.....	.....	At the navy-yard, Norfolk, Va., fitting out.
[Placed in commission Apr. 4, 1910, at the navy-yard, Norfolk, Va.]	.....	.....	.....
De Long (torpedo boat), Lieut. FRANK H. SADLER, commanding during first commission.	.....	.....	.....	At the navy-yard, Charleston, S. C.
[Placed out of commission Aug. 7, 1909, at the navy-yard, Boston, Mass. Placed in commission Apr. 30, 1910, at the navy-yard, Boston, Mass. Placed in reserve May 20, 1910, at the navy-yard, Charleston, S. C.]	.....	.....	.....

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Denver (cruiser, third class), Commander EDWARD E. CAPEHART, commanding.				
[Placed out of commission Mar. 12, 1910, at the navy-yard, Mare Island, Cal.]				
	1909.	1909.	<i>Knots.</i>	
Woosung, China.....	July 2	July 8	.....	Cruising with squadron.
Nanking, China.....	July 9	July 16	212	Do.
Woosung, China.....	July 17	July 22	212	Do.
Tsingtau, China.....	July 24	July 29	405	Do.
Chefoo, China.....	July 30	Aug. 9	250	Do.
Outside Chefoo, China.....	Aug. 9	Aug. 13	.....	Do.
Chefoo, China.....	Aug. 13	Aug. 17	.....	Do.
Outside Chefoo, China.....	Aug. 17	Aug. 19	.....	Do.
Wei Hai Wei, China.....	Aug. 20	Aug. 23	40	Do.
Chinwangtao, China.....	Aug. 24	Aug. 30	200	Do.
Dalny, Manchuria.....	Aug. 31	Sept. 8	150	Do.
Chefoo, China.....	Sept. 9	Sept. 9	93	Do.
Hongkong, China.....	Sept. 14	Sept. 20	1,217	Do.
Cavite, P. I.....	Sept. 23	Sept. 27	650	Do.
Target range, Manila Bay.....	Sept. 27	Oct. 1	10	Preparing for target practice.
Cavite, P. I.....	Oct. 1	Oct. 11	.....	With squadron.
Olongapo, P. I.....	Oct. 11	Oct. 12	.....	To dock ship.
Dry dock Dewey.....	Oct. 12	Oct. 16	.....	In dry dock.
Sublg Bay, P. I.....	Oct. 16	do	.....	Preparing for target practice.
Olongapo, P. I.....	do	Oct. 19	.....	Do.
Sublg Bay, P. I.....	Oct. 19	Oct. 22	.....	Do.
Cavite, P. I.....	Oct. 23	Oct. 25	.....	Target practice and on target range.
Target range.....	Oct. 25	Oct. 26	.....	Do.
Cavite, P. I.....	Oct. 26	Nov. 10	.....	Do.
Do.....	Nov. 10	Nov. 11	.....	Do.
Do.....	Nov. 11	do	.....	Do.
Manila Bay, P. I.....	do	Nov. 12	.....	Do.
Cavite, P. I.....	Nov. 12	Nov. 14	.....	Do.
Manila Bay, P. I.....	Nov. 14	Nov. 15	.....	Do.
Cavite, P. I.....	Nov. 15	Nov. 16	.....	Do.
Manila Bay, P. I.....	Nov. 16	Nov. 21	.....	Do.
Cavite, P. I.....	Nov. 21	Nov. 24	.....	Do.
Manila Bay, P. I.....	Nov. 24	Nov. 25	.....	Do.
Olongapo, P. I.....	Nov. 25	Dec. 2	60	Do.
Do.....	Dec. 2	Dec. 3	.....	Do.
Do.....	Dec. 3	Dec. 4	.....	Do.
Do.....	Dec. 4	Dec. 6	.....	Do.
Cavite, P. I.....	Dec. 6	Dec. 7	.....	Do.
Manila Bay, P. I.....	Dec. 7	Dec. 8	.....	Do.
Cavite, P. I.....	Dec. 8	Dec. 9	.....	Do.
Manila Bay, P. I.....	Dec. 9	Dec. 10	.....	Making passage.
Cavite, P. I.....	Dec. 10	Dec. 11	.....	Do.
Manila, P. I.....	Dec. 11	Dec. 13	.....	Do.
Cavite, P. I.....	Dec. 13	Dec. 14	.....	Do.
Olongapo, P. I.....	Dec. 14	Dec. 22	60	Do.
Cavite, P. I.....	Dec. 22	Dec. 26	.....	Do.
Do.....	Dec. 26	.....	.....	Do.
Cavite, P. I.....				
	1910.	1910.		
	Jan. 1	Jan. 1	.....	En route to the navy-yard, Mare Island, Cal., to go out of commission.
Guam, Midway Islands.....	Jan. 8	Jan. 12	1,456	Do.
Honolulu, Hawaii.....	Jan. 28	Feb. 4	3,351	Do.
San Francisco, Cal.....	Feb. 14	Feb. 15	2,032	Do.
Navy-yard, Mare Island, Cal.....	Feb. 15	.....	28	Preparing to go out of commission.
Des Moines (cruiser, third class), Commander JOHN H. SHIPLEY, commanding. Relieved by Commander JOHN F. LUBY, Apr. 1, 1910.				
	1909.	1909.		
Boston, Mass.....	Sept. 8	Sept. 6	.....	Under repair.
Tompkinsville, N. Y.....	Sept. 8	Sept. 10	326	To get ammunition for the Des Moines, Tacoma, and Paluueah.
Sandy Hook, N. Y.....	Sept. 10	Sept. 13	11	Preparing for target practice.
Navy-yard, New York.....	Sept. 13	Sept. 20	19	For installation of wireless outfit.
Tompkinsville, N. Y.....	Sept. 20	Sept. 21	7	Awaiting orders.
Guantanamo Bay, Cuba.....	Sept. 26	Oct. 1	1,119	For record target practice.
Cape Cruz, Cuba.....	Oct. 2	Oct. 24	165	Target practice.
Guantanamo Bay, Cuba.....	Oct. 25	Oct. 26	165	For coal.
Cristobal, Isthmian Canal Zone.....	Oct. 29	Nov. 17	698	Preparing for survey of the coast of Costa Rica.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1909.	1909.	<i>Knots.</i>	
Port Limon, Costa Rica.....	Nov. 18	Nov. 22	207	Reporting on Nicaraguan situation.
Greytown, Nicaragua.....	Nov. 23	Nov. 23	67	Reporting conditions at Greytown.
Port Limon, Costa Rica.....	do.....	Dec. 8	67	In charge of situation on the east coast of Nicaragua during civil troubles.
Bluefields, Nicaragua.....	Dec. 9	.....	120	Do.
	1910.	1910.		
Bluefields, Nicaragua.....	.....	Jan. 8	.....	Protecting American interests.
Bocas del Toro, Panama.....	Jan. 9	Jan. 13	139	To coal ship.
Bluefields, Nicaragua.....	Jan. 14	Jan. 31	200	To observe operations of Madriz and revolutionary forces.
Greytown, Nicaragua.....	Jan. 31	do.....	52	Protecting American interests.
Corn Island, Nicaragua.....	Feb. 1	Feb. 1	75	Do.
Greytown, Nicaragua.....	Feb. 2	Feb. 3	81	Do.
Bluefields, Nicaragua.....	Feb. 3	Feb. 11	63	Do.
Port Limon, Costa Rica.....	Feb. 12	Feb. 14	109	To settle unpaid bills for stores, telegrams, etc.
Bocas del Toro, Panama.....	Feb. 14	Feb. 15	51	To coal ship.
Cristobal, Isthmian Canal Zone.....	Feb. 16	Mar. 4	111	Held physical tests of officers and gave crew liberty.
Bocas del Toro, Panama.....	Mar. 5	Mar. 18	140	Midshipmen's examination.
Colon, Panama.....	Mar. 19	Mar. 19	124	For stores.
Hampton Roads, Va.....	Mar. 26	Mar. 28	1,696	Preparing for trip to Liberia.
Navy-yard, Norfolk, Va.....	Mar. 28	Apr. 15	.....	To dock ship.
St. Vincent, Cape de Verde Islands.....	Apr. 26	Apr. 30	2,966	En route to Liberia to relieve Birmingham.
Monrovia, Liberia.....	May 4	May 5	1,039	Investigating conditions in Liberia.
Cape Palmas, Liberia.....	May 6	June 5	249	Do.
Dakar, Senegal.....	June 9	June 19	991	Do.
Cape Mount, Liberia.....	June 22	June 23	672	Do.
Monrovia, Liberia.....	June 23	June 27	47	Do.
Marshall, Liberia.....	June 27	June 28	35	Do.
Grand Bassa, Liberia.....	June 28	June 30	25	Do.
Cestos, Liberia.....	June 30	.....	43	Do.
Detroit (cruiser, third class).....	.....	.....	.....	At the navy-yard, Boston, Mass.
Dixie (tender) Lieut. PAUL FOLEY, commanding.	1909.	1909.		
Provincetown, Mass.....	.....	July 2	.....	Parent ship for Atlantic Torpedo Fleet.
Rockport, Mass.....	July 2	July 7	49	Do.
Provincetown, Mass.....	July 7	Aug. 5	53	Do.
Bradford, R. I.....	Aug. 5	Aug. 6	152	Do.
Newport, R. I.....	Aug. 6	Aug. 11	8	Do.
Hope Island, R. I.....	Aug. 11	Aug. 29	8	Do.
Newport, R. I.....	Aug. 29	Aug. 31	8	Do.
Buzzards Bay, Mass.....	Aug. 31	Sept. 4	28	Do.
Hampton Roads, Va.....	Sept. 6	Sept. 8	379	Do.
Southern drill grounds.....	Sept. 8	Sept. 11	52	Target practice.
Hampton Roads, Va.....	Sept. 11	Sept. 13	52	Parent ship for Atlantic Torpedo Fleet.
Norfolk, Va.....	Sept. 13	Sept. 18	12	Do.
Hampton Roads, Va.....	Sept. 18	Sept. 21	12	Do.
Lewes, Del.....	Sept. 21	Sept. 22	152	Do.
Tompkinsville, N. Y.....	Sept. 23	Sept. 30	144	Do.
North River, New York City.....	Sept. 30	Oct. 1	14	For the Hudson-Fulton celebration.
Newburgh, N. Y.....	Oct. 1	Oct. 1	86	Duty in connection with the Hudson-Fulton celebration.
New York City.....	do.....	Oct. 3	86	Do.
Poughkeepsie, N. Y.....	Oct. 3	Oct. 4	60	Do.
Kingston, N. Y.....	Oct. 4	Oct. 12	72	Do.
New York City.....	Oct. 12	Oct. 21	70	To rejoin flotilla.
Boston, Mass.....	Oct. 22	Oct. 28	319	Transportation of draft for Flusser.
Hampton Roads, Va.....	Oct. 30	Nov. 1	542	Submarine towing duty.
Charleston, S. C.....	Nov. 4	Nov. 7	416	Do.
New York, N. Y.....	Nov. 9	Nov. 11	628	Do.
Charleston, S. C.....	Nov. 14	Nov. 19	633	Do.
Philadelphia, Pa.....	Nov. 21	Dec. 5	591	To coal ship.
Cristobal, Isthmian Canal Zone.....	Dec. 12	Dec. 17	1,944	Transporting Nicaraguan expeditionary force.
Philadelphia, Pa.....	Dec. 24	.....	1,944	To take aboard machine shop.
	1910.	1910.		
Do.....	.....	Jan. 20	.....	Tender to Atlantic Torpedo Fleet.
Boston, Mass.....	Jan. 22	Jan. 26	470	Do.
New York, N. Y.....	Jan. 27	Jan. 30	319	Do.
Tompkinsville, N. Y.....	Jan. 30	Jan. 31	7	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
Philadelphia, Pa.....	Feb. 1	Feb. 10	230	Tender to Atlantic Torpedo Fleet.
Hampton Roads, Va.....	Feb. 11	Feb. 12	236	Do.
Norfolk, Va.....	Feb. 12	Feb. 15	8	Do.
Hampton Roads, Va.....	Feb. 15	Feb. 19	8	Do.
Charleston, S. C.....	Feb. 20	Feb. 23	425	Do.
Navy-yard, Charleston, S. C.....	Feb. 23	Mar. 20	7	Do.
Charleston, S. C.....	Mar. 20	Mar. 21	7	Do.
Pensacola, Fla.....	Mar. 25	Apr. 12	1,030	Do.
Navy-yard, Pensacola, Fla.....	Apr. 12	Apr. 15	5	Do.
Pensacola, Fla.....	Apr. 15	Apr. 21	5	Do.
Navy-yard, Charleston, S. C.....	Apr. 25	May 5	1,030	Do.
Hampton Roads, Va.....	May 7	May 9	396	Transporting naval brigade of 500 men to Washington for the unveiling of the Kosciusko statue.
Washington, D. C.....	May 10	May 13	180	Do.
Hampton Roads, Va.....	May 14	May 14	180	Do.
Boston, Mass.....	May 16	May 22	482	Tender to Atlantic Torpedo Fleet.
Provincetown, Mass.....	May 22	May 28	45	Do.
Lewes, Del.....	May 29	June 4	360	Do.
Bradford, R. I.....	June 5	June 10	238	Do.
Newport, R. I.....	June 10	June 27	8	Do.
Boston, Mass.....	June 27	June 28	166	Do.
Rockland, Me.....	June 29		145	Do.
Dolphin (dispatch boat), Commander THOMAS WASHINGTON commanding. Relieved by Lieut. Commander RUFUS Z. JOHNSTON Dec. 1, 1909. Relieved by Lieut. Commander GEORGE W. LAWS Mar. 25, 1910.				
	1909.	1909.		
New London, Conn.....	July 2	July 2		
Newport, R. I.....	July 2	July 4	45	Orders of the Secretary of the Navy.
Gloucester, Mass.....	July 4	July 22	162	Do.
New York, N. Y.....	July 23	July 24	279	Do.
Newport, R. I.....	July 24	July 25	136	Do.
New York, N. Y.....	July 26	July 27	136	Do.
Navy-yard, New York.....	July 27	Aug. 14	3	Under repair.
Gloucester, Mass.....	Aug. 15	Aug. 16	282	Orders of the Secretary of the Navy.
Newport, R. I.....	Aug. 17	Aug. 19	156	Do.
Gloucester, Mass.....	Aug. 20	Aug. 25	156	Do.
Boston, Mass.....	Aug. 25	do.	22	Do.
Gloucester, Mass.....	do.	Aug. 27	24	Do.
Boston, Mass.....	Aug. 27	do.	22	Do.
Gloucester, Mass.....	do.	Aug. 28	22	Do.
Marblehead, Mass.....	Aug. 28	Aug. 29	11	Do.
Gloucester, Mass.....	Aug. 29	Aug. 30	16	Do.
West Beach, Mass.....	Aug. 30	do.	8	Do.
Gloucester, Mass.....	do.	Sept. 3	8	Do.
West Beach, Mass.....	Sept. 3	do.	8	Do.
Gloucester, Mass.....	do.	Sept. 12	8	Do.
Portsmouth, N. H.....	Sept. 12	Sept. 13	39	Do.
New York, N. Y.....	Sept. 14	Sept. 15	365	Awaiting orders.
Navy-yard, New York.....	Sept. 15	Nov. 12	3	Under repair.
Washington, D. C.....	Nov. 14	Dec. 15	420	Awaiting orders.
Guantanamo, Cuba.....	Dec. 19	Dec. 20	1,300	With Senate committee on board.
Cristobal, Isthmian Canal Zone.....	Dec. 22	Dec. 25	700	Do.
Guantanamo Bay, Cuba.....	Dec. 28	Dec. 28	700	Do.
	1910.	1910.		
Washington, D. C.....	Jan. 2	Mar. 29	1,270	Awaiting orders.
Mount Vernon, Va.....	Mar. 29	do.	14	Special duty.
Washington, D. C.....	do.	Apr. 20	14	Awaiting orders.
Annapolis, Md.....	Apr. 21	Apr. 21	155	Secretary of the Navy.
Washington, D. C.....	Apr. 22	Apr. 26	155	Preparing for target practice.
Piney Point, Md.....	Apr. 26	May 3	81	Do.
Hampton Roads, Va.....	May 4	May 4	89	Do.
Lynnhaven Bay, Va.....	do.	May 5	17	Do.
Washington, D. C.....	May 6	May 8	167	Secretary of the Navy.
Mount Vernon, Va.....	May 8	do.	17	Do.
Washington, D. C.....	do.	May 9	17	Do.
New York City.....	May 10	May 18	426	Do.
Washington, D. C.....	May 19	May 22	426	Do.
Mount Vernon, Va.....	May 22	do.	21	Do.
Washington, D. C.....	do.	May 26	21	Do.
Mount Vernon, Va.....	May 26	do.	13	Governor and state legislature of Louisiana.
Washington, D. C.....	do.	May 29	13	Secretary of the Navy.
Deep Point, Va.....	May 29	do.	25	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
Washington, D. C.	May 29	May 29	25	Secretary of the Navy.
Annapolis, Md.	June 3	June 3	155	Do.
New York City	June 5	June 5	394	Do.
Glen Cove, N. Y.	..do.	June 6	18	Do.
New York City	June 6	June 17	19	Do.
Stapleton, N. Y.	June 18	June 18	14	Do.
New York City	..do.	June 19	14	Do.
Oyster Bay, N. Y.	June 19	June 20	27	Do.
New York City	June 20	June 26	27	Do.
Gardiners Bay, N. Y.	June 26	June 27	93	Do.
New London, Conn.	June 27	.....	19	Do.
Don Juan de Austria (gunboat).....	.....	.....	.....	Loaned to the Naval Militia, Michigan.
Dorothea (converted yacht).....	.....	.....	.....	Loaned to the Naval Militia, Ohio.
Drayton (destroyer).....	.....	.....	.....	Under construction at the Bath Iron Works, Bath, Me.
Dubuque (gunboat), Commander JOHN E. CRAVEN commanding. Relieved by Commander HAROLD K. HINES Apr. 11, 1910.	.....	.....	.....	.....
	1909.	1909.		
Puerto Cortez, Honduras.....	.....	July 17	.....	Protecting American interests.
Celba, Honduras.....	July 18	July 18	72	Do.
Puerto Cortez, Honduras.....	July 19	July 21	72	Do.
Guantanamo Bay, Cuba.....	July 25	Oct. 5	642	For provisions.
Cape Cruz, Cuba.....	Oct. 6	Oct. 25	164	Small-arms target practice.
Guantanamo Bay, Cuba.....	Oct. 26	Oct. 29	170	Awaiting orders.
Portsmouth, N. H.	Nov. 6	.....	1,460	For repairs.
	1910.	1910.		
Portsmouth, N. H.	.....	Jan. 16	.....	Under repair.
Navy-yard, New York.....	Jan. 18	Jan. 22	307	Taking aboard ordnance stores, etc.
Guantanamo Bay, Cuba.....	Jan. 28	Jan. 29	1,274	Ordered to Pensacola.
Key West, Fla.	Jan. 31	Feb. 3	553	To coal ship.
Pensacola, Fla.	Feb. 6	Feb. 10	464	For the Mardi Gras celebration.
Tampa, Fla.	Feb. 12	Feb. 27	285	For the Panama Canal celebration.
Key West, Fla.	Feb. 28	Mar. 2	218	To take on board equipment for salvaging coal barge No. 150.
Habana, Cuba.....	Mar. 3	Mar. 4	89	Salvaging coal barge No. 150.
Off Guanabo River, Cuba.....	Mar. 4	Mar. 17	20	Do.
Key West, Fla.	Mar. 18	Mar. 19	83	Do.
Habana, Cuba.....	Mar. 19	Mar. 20	89	In relation to coal barge No. 150.
Key West, Fla.	Mar. 21	Mar. 22	89	Awaiting orders.
Puerto Plata, Santo Domingo.....	Mar. 25	Mar. 27	687	Protecting American interests.
Santo Domingo city, Santo Domingo.	Mar. 29	Apr. 8	235	Do.
Guantanamo Bay, Cuba.....	Apr. 10	Apr. 13	411	Under orders to proceed to Nicaragua.
Bluefields, Nicaragua.....	Apr. 16	Apr. 26	695	On duty on the east coast of Nicaragua protecting American interests.
Bocas del Toro, Panama.....	Apr. 27	Apr. 30	156	Do.
Bluefields, Nicaragua.....	May 1	May 15	156	Do.
Little Corn Island, Nicaragua.....	May 16	May 16	42	Do.
Bluefields, Nicaragua.....	..do.	May 26	37	Do.
Cristobal, Isthmian Canal Zone.....	May 28	May 29	254	Do.
Bluefields, Nicaragua.....	May 30	May 31	251	Do.
Cristobal, Isthmian Canal Zone.....	June 2	June 4	237	Do.
Bluefields, Nicaragua.....	June 5	June 12	235	Do.
Pearl Lagoon, Nicaragua.....	June 12	..do.	.....	Do.
Little Corn Island, Nicaragua.....	June 13	June 16	25	Do.
Bluefields, Nicaragua.....	June 16	June 25	35	Do.
Cristobal, Isthmian Canal Zone.....	June 27	.....	237	Do.
Dupont (torpedo boat), Lieut. WILLIAM F. HALSEY, Jr., commanding.	.....	.....	.....	The Dupont was attached to the Third Torpedo Flotilla until placed in reserve at Charleston. On May 19, 1910, the Dupont was assigned to the Naval Militia of North Carolina, and at the end of the fiscal year the vessel is at Newbern, N. C.
[Placed in reserve Nov. 30, 1909, at the navy-yard, Charleston, S. C.]	.....	.....	.....	.....
Eagle (converted yacht), Lieut. Commander GEORGE R. MARVELL, commanding. Relieved by Lieut. Commander FRITZ L. SANDOZ, July 17, 1909. Relieved by Lieut. Commander HARLAN P. PERRILL, Feb. 2, 1910.	.....	.....	.....	.....
	1909.	1909.		
Portsmouth, N. H.	.....	Oct. 11	.....	Repairs.
Provincetown, Mass.	Oct. 12	Oct. 13	80	En route to survey grounds.
Norfolk, Va.	Oct. 16	Oct. 22	520	Coal and provisions.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1909.	1909.	<i>Knots.</i>	
Key West, Fla.....	Oct. 27	Nov. 1	1,000	Coal and provisions.
Guantanamo, Cuba.....	Nov. 4	Nov. 5	570	Do.
Kingston, Jamaica.....	Nov. 6	Nov. 13	190	Shelter from heavy blow.
Bocas del Toro, Panama.....	Nov. 15	Nov. 17	615	Surveying.
Almirante Bay, Panama.....	Nov. 17	Nov. 27	8	Do.
Bocas del Toro, Panama.....	Nov. 27	Nov. 28	8	Do.
Tiger Channel, Panama.....	Nov. 27	Nov. 29	25	Searching for Marletta's lost boats.
Bogue del Drago, Panama.....	Nov. 28	Nov. 30	45	Do.
Port Limon, Costa Rica.....	Nov. 30	Dec. 2	60	Do.
Bocas del Toro, Panama.....	Dec. 2	do	70	Do.
Conception River, Panama.....	Dec. 3	Dec. 3	88	Do.
Cristobal, Canal Zone.....	do	Dec. 4	74	Coal and provisions.
Bocas del Toro, Panama.....	Dec. 5	Dec. 6	142	Surveying.
Almirante Bay, Panama.....	Dec. 6	Dec. 15	8	Do.
Bocas del Toro, Panama.....	Dec. 15	do	8	Do.
Cristobal, Isthmian Canal Zone.....	Dec. 16	Dec. 17	142	Coal and provisions.
Bluefields, Nicaragua.....	Dec. 19	Dec. 19	275	Protecting American interests.
Port Limon, Costa Rica.....	Dec. 20	Dec. 20	129	Do.
Bluefields, Nicaragua.....	Dec. 21	.....	129	Do.
	1910.	1910.		
Bluefields, Nicaragua.....	Jan. 3	Jan. 2	.....	Do.
Bocas del Toro, Panama.....	Jan. 3	Jan. 28	199	Surveying.
Cristobal, Isthmian Canal Zone.....	Jan. 29	Jan. 29	142	For coal and provisions.
Bocas del Toro, Panama.....	Jan. 30	Feb. 2	142	Surveying.
Port Limon, Costa Rica.....	Feb. 3	Feb. 3	70	To take coal and provisions from the Leonidas.
Cristobal, Isthmian Canal Zone.....	Feb. 4	Feb. 21	212	To give liberty.
Guantanamo Bay, Cuba.....	Feb. 25	Mar. 5	700	For coal and provisions.
Port au Prince, Haiti.....	Mar. 6	Mar. 11	189	Surveying duty.
Aux Cayes, Haiti.....	Mar. 12	Mar. 14	207	Do.
Aquin Bay, Haiti.....	Mar. 14	Mar. 22	22	Do.
Guantanamo Bay, Cuba.....	Mar. 23	Mar. 25	181	For coal and provisions.
Aquin Bay, Haiti.....	Mar. 26	Mar. 28	181	Surveying duty.
Jacmel, Haiti.....	Mar. 28	Mar. 30	60	Do.
Do.....	Mar. 30	Mar. 31	30	Do.
Aquin Bay, Haiti.....	Mar. 31	Apr. 2	60	Do.
Working grounds, Haiti.....	Apr. 2	Apr. 5	25	Do.
Jacmel, Haiti.....	Apr. 5	Apr. 9	65	Do.
Guantanamo Bay, Cuba.....	Apr. 10	Apr. 13	225	Coal and provisions.
Aquin Bay, Haiti.....	Apr. 14	Apr. 15	181	Surveying duty.
Jacmel, Haiti.....	Apr. 15	Apr. 18	49	Do.
Working grounds, Haiti.....	Apr. 18	Apr. 29	19	Do.
Guantanamo Bay, Cuba.....	Apr. 30	May 4	225	Coal and provisions.
Aquin Bay, Haiti.....	May 5	May 6	181	Surveying duty.
Working grounds, Haiti.....	May 6	May 13	83	Do.
Jacmel, Haiti.....	May 13	May 16	78	Do.
Fale Cape, Santo Domingo.....	May 16	May 19	70	Do.
Working grounds, Haiti.....	May 19	May 20	23	Do.
Jacmel, Haiti.....	May 20	May 21	70	Do.
Guantanamo Bay, Cuba.....	May 22	May 31	137	Coal and provisions.
Woods Hole, Mass.....	June 7	June 8	1,398	En route Portsmouth, N. H.
Portsmouth, N. H.....	June 9	.....	.....	For repairs and to plot season's work.
Eagle (converted yacht).....	.....	.....	.....	At the navy-yard, Norfolk, Va.
Elicano (gunboat).....	.....	.....	.....	At the naval station, Cavite, P. I.
Elfrida (converted yacht).....	.....	.....	.....	At the end of the fiscal year the Elfrida is at Newbern, N. C., on duty with the Naval Militia of North Carolina.
[Turned over to the Naval Militia of North Carolina on Aug. 20, 1909.]	.....	.....	.....
Enterprise (wooden steam vessel).....	.....	.....	.....	Stricken from the navy list and ordered sold Aug. 6, 1909.
Eriesson (torpedo boat).....	.....	.....	.....	At the navy-yard, Charleston, S. C.
Essex (wooden steam vessel).....	.....	.....	.....	Loaned to the Naval Militia of Ohio.
Farragut (torpedo boat), Lieut. MARTIN K. METCALF, commanding.	.....	.....	.....	At the navy-yard, Mare Island, Cal.
[Placed in reserve Sept. 17, 1909, at the navy-yard, Mare Island, Cal.]	.....	.....	.....
Florida (battle ship).....	.....	.....	.....	Under construction at the navy-yard, New York.
Flusser (destroyer), Lieut. Commander JAMES P. MORTON, commanding.	.....	.....	.....	Attached to the Atlantic Torpedo Fleet.
[Placed in commission Oct. 28, 1909, at the navy-yard, Boston, Mass.]	.....	.....	.....

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
			<i>Knots.</i>	
Foote (torpedo boat).....				At the navy-yard, Charleston, S. C.
Fortune (tender), Lieut. EDWIN H. DODD, commanding. Relieved by Lieut. KIRBY B. CRITTENDEN, Mar. 23, 1910.				Tender to First Submarine Division, Pacific Torpedo Fleet.
Fox (torpedo boat).....				At the navy-yard, Mare Island, Cal.
Franklin (receiving ship), Capt. ALBERT C. DILLINGHAM, commanding. Relieved by Lieut. Commander FRANCIS L. CHADWICK, Nov. 20, 1909. Relieved by Capt. ALFRED REYNOLDS, Nov. 28, 1909.				At the navy-yard, Norfolk, Va.
Galveston (cruiser, third class), Commander JOHN A. HOOGEWERFF, commanding.				
[Placed out of commission Mar. 23, 1910, at the navy-yard, Puget Sound, Wash.]				
	1909.	1909.		
Yokohama, Japan.....		Aug. 6		Under repair.
Chefoo, China.....	Aug. 12	Aug. 18	1,170	Maneuvering with squadron.
White Rock, China.....	Aug. 18	do.	10	Do.
Do.....	Aug. 19	Aug. 20	10	Cruising with squadron.
Weihaiwei, China.....	Aug. 20	Aug. 23	45	Do.
Chingwangtao, China.....	Aug. 24	Aug. 30	186	Do.
Dairen, Manchuria.....	Aug. 31	Sept. 8	133	Do.
Chefoo, China.....	Sept. 9	Sept. 9	90	Do.
Hongkong, China.....	Sept. 14	Sept. 20	1,233	Do.
Cavite, P. I.....	Sept. 23	Sept. 27	651	Preparing for target practice.
Target range.....	Sept. 27	Sept. 28	11	Do.
Do.....	Sept. 28	Oct. 1	25	Do.
Do.....	do.	do.	30	Do.
Cavite, P. I.....	Oct. 1	Oct. 21	30	Do.
Target range.....	Oct. 21	Oct. 22	45	Do.
Cavite, P. I.....	Oct. 22	Oct. 25	75	Do.
Target range.....	Oct. 25	Oct. 26	30	Do.
Cavite, P. I.....	Oct. 26	do.	30	Do.
Target range.....	do.	do.	15	Do.
Cavite, P. I.....	Oct. 27	Oct. 27	15	Do.
Target range.....	do.	do.	25	Do.
Cavite, P. I.....	Oct. 28	Oct. 28	15	Do.
Target range.....	do.	do.	15	Do.
Cavite, P. I.....	Oct. 29	Oct. 29	10	Do.
Target range.....	do.	do.	10	Torpedo attack.
Cavite, P. I.....	do.	Nov. 3	15	Preparing for target practice.
Target range.....	Nov. 3	do.	20	Do.
Do.....	do.	Nov. 4	25	Do.
Do.....	Nov. 4	Nov. 5	20	Do.
Cavite, P. I.....	Nov. 5	Nov. 8	20	Do.
Target range.....	Nov. 8	do.	30	Do.
Cavite, P. I.....	do.	Nov. 9	30	Do.
Target range.....	Nov. 9	do.	30	Do.
Cavite, P. I.....	do.	Nov. 17	30	Do.
Target range.....	Nov. 17	Nov. 18	20	Do.
Do.....	Nov. 18	Nov. 19	20	Do.
Do.....	Nov. 19	Nov. 22	10	Do.
Do.....	Nov. 22	Nov. 23	10	Do.
Do.....	Nov. 23	do.	20	Do.
Cavite, P. I.....	do.	Nov. 24	30	Do.
Olongapo, P. I.....	Nov. 24	Nov. 30	60	Do.
Target range.....	Nov. 30	do.	17	Do.
Olongapo, P. I.....	do.	Dec. 2	18	Do.
Target range.....	Dec. 2	do.	5	Day spotting practice.
Olongapo, P. I.....	do.	Dec. 3	5	Day battle practice.
Target range.....	Dec. 3	do.	80	Do.
Olongapo, P. I.....	do.	Dec. 6	78	Observing Cruiser Squadron attack.
Target range.....	Dec. 6	do.	30	Orders, commander Third Squadron.
Cavite, P. I.....	do.	Dec. 7	75	Night spotting practice.
Target range.....	Dec. 7	do.	20	Do.
Do.....	do.	Dec. 8	20	Do.
Do.....	Dec. 8	do.	20	Do.
Do.....	do.	Dec. 9	20	Preparing for target practice.
Cavite, P. I.....	Dec. 9	do.	10	Night battle practice.
Target range.....	Dec. 10	Dec. 10	20	Orders, commander Third Squadron.
Cavite, P. I.....	do.	Dec. 17	10	Small-arms practice.
Olongapo, P. I.....	Dec. 17	Dec. 23	63	Orders, commander Third Squadron.
Cavite, P. I.....	Dec. 23	do.	63	

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
Cavite, P. I.....		Jan. 1		Ordered home to go out of commission.
Guam, Midway Islands.....	Jan. 8	Jan. 12	1,444	En route to the navy-yard, Bremer- ton, Wash.
Honolulu, Hawaii.....	Jan. 27	Feb. 4	3,357	Do.
San Francisco, Cal.....	Feb. 14	Feb. 17	2,085	Do.
Bremerton, Wash.....	Feb. 21		814	To go out of commission.
General Alava (transport).....				At the naval station, Cavite, P. I.
Georgia (battle ship), Capt. TEM- PLIN M. PORTS, commanding. Relieved by Capt. WILLIAM L. RODGERS, Dec. 5, 1909.				
	1909.	1909.		
Rockland, Me.....	July 2	July 6		To spend Fourth of July.
Provincetown, Mass.....	July 10	Aug. 4		With Atlantic Fleet. Fleet drills, calibration practice, etc.
Hampton Roads, Va.....	Aug. 7	Sept. 20		Target practice on the southern drill grounds.
New York City.....	Sept. 22	Oct. 5		With Atlantic Fleet for the Hudson- Fulton celebration.
Philadelphia, Pa.....	Oct. 7	Nov. 30		Repairs and alterations.
Hampton Roads, Va.....	Dec. 1	Dec. 3		Fleet rendezvous.
Do.....	Dec. 4	Dec. 6		Fleet evolutions.
Do.....	Dec. 10	Dec. 14		Tactical exercises.
Do.....	Dec. 16	Dec. 20		Do.
Norfolk, Va.....	Dec. 20			For repairs.
	1910.	1910.		
Norfolk, Va.....		Jan. 5		Under repair.
Guantanamo Bay, Cuba.....	Jan. 12	Mar. 24	1,100	With Atlantic Fleet engaged in drills and exercises.
Hampton Roads, Va.....	Mar. 28	Apr. 4	1,100	With Atlantic Fleet.
Southern drill grounds.....	Apr. 4	Apr. 11		Preparing for target practice.
Hampton Roads, Va.....	Apr. 11	Apr. 15		Bore sighting.
Southern drill grounds.....	Apr. 15	Apr. 28		Holding target practice.
Hampton Roads, Va.....	Apr. 28	do		To check bore sighting.
Philadelphia, Pa.....	Apr. 29		251	For repairs.
Glacier (supply ship), Commander ROBERT F. LOPEZ, commanding.				
	1909.	1909.		
Mare Island, Cal.....	Sept. 3	Sept. 3		Loading stores.
South Vallejo, Cal.....	Sept. 3	Sept. 7	2	
California City, Cal.....	Sept. 7	Sept. 8	19	For coal.
San Francisco, Cal.....	Sept. 8	Sept. 22	9	Supply ship Pacific Fleet.
Honolulu, Hawaii.....	Oct. 1	Oct. 3	2,100	Do.
Nares Harbor, Admiralty Island.....	Oct. 19	Oct. 22	3,611	Do.
Seeadler Harbor, Admiralty Island.....	Oct. 22	do	38	Do.
Nares Harbor.....	do	Oct. 23	38	Do.
Manila, P. I.....	Oct. 30	Nov. 4	1,920	Do.
Cavite, P. I.....	Nov. 4	Nov. 11	5	Swing ship.
San Nicholas Shoal.....	Nov. 11	do	11	Supply Pacific Fleet.
Cavite, P. I.....	do	Nov. 17	11	Do.
Fleet rendezvous, Manila Bay.....	Nov. 17	Nov. 19	11	Do.
Cavite, P. I.....	Nov. 19	Nov. 21	11	Do.
No. 2 target range, Manila Bay.....	Nov. 21	do	15	To load frozen beef.
Manila, P. I.....	do	Nov. 22	15	To get marines.
Olongapo, P. I.....	Nov. 22	Nov. 23	65	Transport marines.
Manila, P. I.....	Nov. 23	Nov. 24	65	Do.
Olongapo, P. I.....	Nov. 24	Nov. 28	65	To get army officers.
Manila, P. I.....	Nov. 28	do	65	Transport army officers.
Olongapo, P. I.....	Nov. 29	Nov. 29	65	Transport army officers and fleet mail.
Manila, P. I.....	Nov. 30	Nov. 30	65	For coal.
Cavite, P. I.....	do	Dec. 1	5	For supplies.
Manila, P. I.....	Dec. 1	Dec. 3	5	Supply fleet.
Cavite, P. I.....	Dec. 3	Dec. 4	5	To dock ship.
Olongapo, P. I.....	Dec. 4	Dec. 6	63	Supply Pacific Fleet.
Manila, P. I.....	Dec. 6	Dec. 10	65	Do.
Hongkong, China.....	Dec. 13	Dec. 19	640	Do.
Woosung, China.....	Dec. 23		820	
	1910.	1910.		
Woosung, China.....		Jan. 5		Supply fleet.
Nagasaki, Japan.....	Jan. 6	Jan. 7	453	Do.
Yokohama, Japan.....	Jan. 10	Jan. 18	740	Supply fleet and coal.
Honolulu, Hawaii.....	Jan. 31	Feb. 7	3,615	Do.
San Francisco, Cal.....	Feb. 14	Feb. 23	2,090	Supply Fleet.
California City, Cal.....	Feb. 23	Feb. 24	9	Coal.
Mare Island Light, Cal.....	Feb. 24	Feb. 25	17	Ammunition for fleet.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
San Francisco, Cal.	Feb. 25	Feb. 28	25	Supply fleet.
Mare Island Light, Cal.	Feb. 28	Mar. 8	25	For targets and supplies.
San Pablo Bay, Cal.	Mar. 8	..do..	9	Swing ship.
Mare Island Light, Cal. ....	..do..	Mar. 9	9	Towing target raft.
Santa Barbara, Cal.	Mar. 11	Mar. 13	304	Do.
Measured mile course.	Mar. 13	..do..	10	Standardizing.
Santa Barbara, Cal. ....	..do..	Mar. 14	10	Towing target.
Santa Barbara Channel.	Mar. 14	..do..	28	Do.
Santa Barbara, Cal. ....	..do..	Mar. 15	28	Do.
Anacapa Passage, Santa Barbara, Channel.	Mar. 15	..do..	40	Do.
Beechers Bay, Cal. ....	..do..	Mar. 18	35	Do.
Santa Barbara, Cal.	Mar. 18	Mar. 24	30	Swing ship.
Santa Barbara Channel.	Mar. 24	..do..	10	Do.
Santa Barbara, Cal. ....	..do..	..do..	10	Cruising with target.
Santa Barbara Channel. ....	..do..	Mar. 25	29	Do.
Santa Barbara, Cal.	Mar. 25	..do..	20	Do.
Measured mile course. ....	..do..	..do..	10	Standardizing.
Santa Barbara, Cal. ....	..do..	Mar. 27	10	Cruising with target.
Beechers Bay, Cal.	Mar. 28	Mar. 28	30	Do.
To sea and return to ..do..	..do..	..do..	25	Do.
Santa Rosa Island, Cal. ....	..do..	Mar. 29	25	Do.
To sea for target practice.	Mar. 31	Apr. 3	..do..	Do.
Mare Island, Cal.	Apr. 5	..do..	290	Under repair.
Gloucester (converted yacht)				Loaned to the Naval Militia, New York.
[Loaned to the Naval Militia of the State of New York, Sept. 3, 1909, at the navy-yard, Boston, Mass.]				
Goldsborough (torpedo boat), Lieut. ERNEST A. SWANSON, commanding. Relieved by Ensign ROSS S. CULP, Dec. 31, 1909.				Attached to the Pacific Torpedo Fleet.
Gopher (wooden stearn vessel)				Loaned to the Naval Militia, Minnesota.
Grampus (submarine), Lieut. EDWIN H. DODD, commanding. Relieved by Ensign JAMES P. OLDING, Mar. 23, 1910.				Attached to the Pacific Torpedo Fleet.
Granite State (wooden sailing vessel).				Loaned to the Naval Militia, New York.
Grayling (submarine), Lieut. OWEN HILL, commanding. Relieved by Lieut. DONALD C. BINGHAM, Jan. 19, 1910.				Attached to the Atlantic Torpedo Fleet.
[Placed in commission Nov. 23, 1909, at the navy-yard, Boston, Mass.]				
Gunboat No. 16 (gunboat)				Contract not yet awarded.
Gwin (torpedo boat)				At the torpedo station, Newport, R. I.
Hancock (receiving ship), Lieut. Commander CHARLES A. BRAND, commanding. Relieved by Lieut. POPE WASHINGTON, Sept. 1, 1909. Relieved by Capt. WALTER C. COWLES, Nov. 1, 1909.				At the navy-yard, New York.
Hannibal (collier)				Collier service on the Atlantic coast and in the West Indies.
Hartford (wooden cruiser), Commander HAROLD K. HINES, commanding. Relieved by Commander JOHN HOOD, Aug. 28, 1909. Relieved by Commander ARCHIBALD H. SCALES, June 11, 1910.				
[Placed in reserve Aug. 28, 1909, at the Naval Academy, Annapolis.]				
New London, Conn.	1909.	1909.		Naval Academy Practice Squadron.
Gardiners Bay, L. I.	July 6	July 9	21	Do.
New London, Conn.	July 9	July 12	16	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1909.	1909.	<i>Knots.</i>	
Gardiners Bay, L. I.	July 12	July 14	21	Naval Academy Practice Squadron.
Bradford, R. I.	July 14	Do	53	Do.
Ordainers Bay, L. I.	Do	July 16	55	Do.
New London, Conn.	July 16	July 19	21	Do.
Gardiners Bay, L. I.	July 19	July 23	20	Do.
New London, Conn.	July 23	July 26	19	Do.
Newport, R. I.	July 26	July 29	56	Do.
Boston, Mass.	July 30	Aug. 3	164	Do.
Gloucester, Mass.	Aug. 3	Aug. 5	27	Do.
Portsmouth, N. H.	Aug. 5	Aug. 7	36	Do.
Portland, Me.	Aug. 7	Aug. 10	49	Do.
Bath, Me.	Aug. 10	Aug. 15	39	Do.
Bar Harbor, Me.	Aug. 16	Aug. 18	114	Do.
Newport, R. I.	Aug. 19	Aug. 23	260	Do.
Solomons Island, Md.	Aug. 25	Aug. 26	441	Do.
Annapolis, Md.	Aug. 27	Dec. 19	43	To disembark midshipmen.
Norfolk, Va.	Dec. 20			Under repair.
	1910.	1910.		
Norfolk, Va.		Apr. 6		Under repair.
Annapolis, Md.	Apr. 7			Assigned to duty as station ship at the Naval Academy, Annapolis, Md., Feb. 15, 1910, as the relief of the Severn.
Hawk (converted yacht)				Loaned to the Naval Militia of New York.
[Transferred from the Naval Militia of Ohio to the Naval Militia of New York, Aug. 3, 1909.]				
Hector (collier)				Collier service on the Atlantic coast during most of the fiscal year. The Hector made a trip to Rio de Janeiro in May to coal the Special Service Squadron.
[Placed in service Oct. 22, 1909, at the navy-yard, Norfolk, Va.]				
Helena (gunboat), Commander WILSON W. BUCHANAN, commanding. Relieved by Commander REUBEN O. BITLER, Dec. 21, 1909.				
	1909.	1909.		
Hongkong, China.		July 25		Senior officer at Hongkong and vicinity.
Canton, China.	July 25	Aug. 8	89	Inspection trip, covering part of district.
Hongkong, China.	Aug. 8	Sept. 9	90	Senior officer at Hongkong and vicinity.
Mouth of West River.	Sept. 9	Sept. 10	52	Grounded on Macao Bar.
Hongkong, China.	Sept. 10	Sept. 23	55	Senior officer at Hongkong and vicinity.
Bias Bay, China.	Sept. 23	Sept. 24	62	In company with Samar.
Hongkong, China.	Sept. 24	Oct. 8	68	Senior officer at Hongkong and vicinity.
Tiger Island, Canton River, China.	Oct. 8	Oct. 9	45	Anchored, having struck some underwater obstruction.
Hongkong, China.	Oct. 9	Oct. 14	45	Returned to Hongkong for docking and examination.
Talkoo Docks, Hongkong, China.	Oct. 14	Oct. 15	5	Docking ship and repairing propeller blade.
Hongkong, China.	Oct. 15	Nov. 3	5	Senior officer at Hongkong and vicinity.
Canton, China.	Nov. 3	Nov. 9	84	Inspection trip.
Hongkong, China.	Nov. 9	Nov. 16	84	Senior officer at Hongkong and vicinity.
Swatow, China.	Nov. 17	Nov. 19	185	En route to Shanghai with Samar and inspection of district.
Owick Bay, China.	Nov. 19	Nov. 20	54	Do.
Amoy, China.	Nov. 20	Nov. 23	84	Do.
Tung Yung Island Light, China.	Nov. 24	Nov. 26	192	Do.
Shanghai, China.	Nov. 28	Dec. 1	382	For further instructions for target practice at Nimrod Sound.
Gutzlaff Island, China.	Dec. 1	Dec. 2	65	In company with Villalobos, Callao, and Samar.
Flake Island, Nimrod Sound, China.	Dec. 2	Dec. 20	95	Calibration, spotting, and battle practice.
Shanghai, China.	Dec. 21	Dec. 27	160	To relieve Wilmington as senior officer present in Yang-tze Valley.
Wosung, China.	Dec. 27	Dec. 28	14	Transporting men to Shanghai, China.
Shanghai, China.	Dec. 28		14	Do.
	1910.	1910.		
Shanghai, China.		Jan. 6		Chinese River service.
Kiangnan dock, Shanghai, China.	Jan. 6	Jan. 9	4	Docking and replacing propeller blade.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
Shanghai, China.....	Jan. 9	Feb. 1	4	Chinese River service.
Wosung, China.....	Feb. 1	Feb. 2	18	Do.
Nanking, China.....	Feb. 3	Feb. 5	192	Do.
Wuhu, China.....	Feb. 5	Feb. 6	52	Do.
Barkers Island, China.....	Feb. 6	Feb. 7	23	Do.
Wuhu, China.....	Feb. 7	Feb. 8	23	Do.
Nanking, China.....	Feb. 8	Feb. 13	52	Do.
Chinkiang, China.....	Feb. 13	Feb. 14	47	Do.
Shanghai, China.....	Feb. 15	Apr. 10	165	Do.
Wosung, China.....	Apr. 10	Apr. 11	14	Do.
Huitau Bay, China.....	Apr. 14	Apr. 23	520	Do.
Wosung, China.....	Apr. 26	Apr. 29	520	Do.
Nanking, China.....	Apr. 30	May 1	197	Do.
Hankow, China.....	May 3	June 5	388	Do.
Kiukiang, China.....	June 5	June 7	142	Do.
Wuhu, China.....	June 7	June 8	194	Do.
Nanking, China.....	June 8	June 22	52	Do.
Shanghai, China.....	June 23	.....	212	Do.
Hercules (tug).....	.....	.....	.....	Attached to the navy-yard, Norfolk, Va.
Hist (surveying vessel), Commander ARMISTEAD RUST, commanding.	.....	.....	.....	.....
	1909.	1909.	.....	.....
Charleston, S. C.....	.....	July 6	.....	En route Portsmouth, N. H.
Newport, R. I.....	July 10	July 10	374	Do.
Portsmouth, N. H.....	July 11	Nov. 1	163	To give liberty and to plot season's work.
Norfolk, Va.....	Nov. 4	Nov. 5	560	En route to surveying grounds.
Charleston, S. C.....	Nov. 7	Nov. 8	428	Do.
Key West, Fla.....	Nov. 11	Nov. 16	578	Do.
Niquero, Cuba.....	Nov. 19	Nov. 26	697	Cape Cruz Casilda Surveying Expedition.
Guantanamo Bay, Cuba.....	Nov. 27	Dec. 1	172	Do.
Niquero, Cuba.....	Dec. 2	Dec. 22	170	Do.
Manzanillo, Cuba.....	Dec. 22	Dec. 23	40	Do.
Santiago de Cuba.....	Dec. 24	Dec. 27	156	Do.
Guantanamo Bay, Cuba.....	Dec. 27	Dec. 29	49	Do.
Manzanillo, Cuba.....	Dec. 30	.....	206	Do.
	1910.	1910.	.....	.....
Manzanillo, Cuba.....	.....	Jan. 3	.....	Surveying duty.
Niquero, Cuba.....	Jan. 3	Jan. 4	40	Do.
Manzanillo, Cuba.....	Jan. 4	Jan. 20	40	Do.
Niquero, Cuba.....	Jan. 20	Jan. 21	34	Do.
Guantanamo Bay, Cuba.....	Jan. 22	Jan. 25	169	Do.
Niquero, Cuba.....	Jan. 26	Jan. 27	176	Do.
Manzanillo, Cuba.....	Jan. 27	Feb. 2	34	Do.
Niquero, Cuba.....	Feb. 2	Feb. 3	67	Do.
Media Luna, Cuba.....	Feb. 3	Feb. 4	12	Do.
Manzanillo, Cuba.....	Feb. 4	do	57	Do.
Niquero, Cuba.....	do	Feb. 11	57	Do.
Media Luna, Cuba.....	Feb. 11	Feb. 12	37	Do.
Manzanillo, Cuba.....	Feb. 12	Mar. 27	23	Do.
Media Luna, Cuba.....	Mar. 27	Mar. 29	24	Do.
Manzanillo, Cuba.....	Mar. 29	June 2	32	Do.
Pelon Harbor, Cuba.....	June 3	June 4	145	Do.
Media Luna, Cuba.....	June 4	June 6	74	Do.
Pelon Harbor, Cuba.....	June 8	June 8	93	Do.
Guantanamo Bay, Cuba.....	June 9	June 11	103	Do.
Norfolk, Va.....	June 17	June 17	986	En route to Portsmouth, N. H.
Portsmouth, N. H.....	June 20	.....	531	To plot season's work.
Holland (submarine).....	.....	.....	.....	At the navy-yard, Norfolk, Va.
Hopkins (destroyer), Lieut. ERNEST FRIEDRICK, commanding. Relieved by Ensign HAROLD G. BOWEN, Mar. 15, 1910.	.....	.....	.....	Attached to the Pacific Torpedo Fleet.
Hornet (converted yacht).....	.....	.....	.....	At the navy-yard, Norfolk, Va., when stricken from the navy list.
[Stricken from the navy list Mar. 18, 1910.]	.....	.....	.....	.....
Hull (destroyer), Lieut. FRANK MCCOMMON, commanding. Relieved by Lieut. MARTIN K. METCALF, Oct. 12, 1909. Relieved by Ensign HAROLD JONES, Feb. 12, 1910.	.....	.....	.....	Attached to the Pacific Torpedo Fleet.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
			<i>Knots.</i>	
Huntress (converted yacht).....				Loaned to the Naval Militia, Missouri.
Idaho (battle ship), Capt. JAMES M. HELM, commanding. Relieved by Capt. HERBERT O. DUNN, Oct. 16, 1909.	1909.	1909.		
Philadelphia, Pa.....		July 25		Docking and repairs.
Provincetown, Mass.....	July 27	Aug. 4	496	To join Atlantic Fleet.
Hampton Roads, Va.....	Aug. 7	Aug. 12	639	Coaled ship.
Southern drill grounds.....	Aug. 12	Aug. 18	59	Preparing for target practice.
Hampton Roads, Va.....	Aug. 19	Aug. 20	67	Bore sighting.
Southern drill grounds.....	Aug. 21	Aug. 28	58	Record target practice.
Hampton Roads, Va.....	Aug. 28	Aug. 30	50	Checking bore sights.
Southern drill grounds.....	Aug. 30	Sept. 12	54	Battle practice.
Hampton Roads, Va.....	Sept. 12	Sept. 20	68	Coaling and painting ship.
New York City.....	Sept. 22	Oct. 5	293	With Atlantic Fleet to participate in Hudson-Fulton celebration.
Philadelphia, Pa.....	Oct. 6		243	For repairs.
	1910.	1910.		
Philadelphia, Pa.....		Jan. 5		Under repair.
Guantanamo Bay, Cuba.....	Jan. 12	Mar. 24	1,305	With Atlantic Fleet engaged in maneuvers and exercises.
Hampton Roads, Va.....	Mar. 28	Apr. 4	1,140	With Atlantic Fleet.
Southern drill grounds.....	Apr. 4	Apr. 11	29	With Atlantic Fleet engaged in target practice.
Hampton Roads, Va.....	Apr. 11	Apr. 15	62	Do.
Southern drill grounds.....	Apr. 15	Apr. 28	31	Do.
Hampton Roads, Va.....	Apr. 28	Apr. 29	65	Do.
Navy-yard, Philadelphia, Pa.....	Apr. 30		232	For repairs.
Illinois (battle ship), Capt. JAMES C. GILMORE, commanding.				At the navy-yard, Boston, Mass.
[Placed out of commission Aug. 4, 1909, at the navy-yard, Boston, Mass.]				
Independence (receiving ship), Capt. JOHN B. MILTON, commanding. Relieved by Capt. EDMUND B. UNDERWOOD, Jan. 15, 1910.				At the navy-yard, Mare Island, Cal.
Indiana (battle ship), Capt. JOHN B. COLLINS, commanding. Relieved by Lieut. Commander ALBERT L. NORTON, July 2, 1909. Relieved by Capt. BENJAMIN TAPPAN, Sept. 4, 1909. Relieved by Lieut. WALTER E. WHITEHEAD, Dec. 6, 1909. Relieved by Capt. FRANCIS H. SHERMAN, Jan. 8, 1910. Relieved by Commander EDWARD H. DURELL, May 10, 1910.				
[Placed in full commission May 10, 1910, at the navy-yard, Philadelphia, Pa.]	1910.	1910.		
Philadelphia, Pa.....		Apr. 15		In reserve and fitting out.
Lewes, Del.....	Apr. 16	Apr. 20	80	Testing the Lacoste ship brake.
Philadelphia, Pa.....	Apr. 21	May 21	80	Placed in full commission May 10.
Lewes, Del.....	May 21	May 24	80	Adjusting compasses.
Annapolis, Md.....	May 25	June 6	282	To join the Naval Academy Practice Squadron.
Hampton Roads, Va.....	June 6	June 9	137	Cruising with the Naval Academy Practice Squadron.
Plymouth, England.....	June 23	June 30	3,251	Do.
Ingalls (transport).....				At the navy-yard, Norfolk, Va., to be fitted up as tender to submarines.
[The transport Ingalls was temporarily transferred to the Navy Department by the War Department on Aug. 2, 1909. The Army appropriation bill, approved Mar. 21, 1910, authorized the Secretary of War to permanently transfer the Ingalls to the Navy Department.]				

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Intrepid (sailing ship).....			<i>Knots.</i>	
Ionle (wooden steam vessel).....				Auxiliary to the Pensacola at the naval training station, San Francisco, Cal. Transferred to the Marine-Hospital Service.
Iowa (battle ship), Commander WILLIAM H. G. BULLARD, commanding. [Placed in commission May 2, 1910, at the navy-yard, New York.]	1910.	1910.		
Norfolk, Va.....	May 24	May 22		Fitting out.
Annapolis, Md.....	June 6	June 6	145	Joined Naval Academy Practice Squadron.
Hampton Roads, Va.....	June 7	June 9	135	On cruise with the Naval Academy Practice Squadron.
Plymouth, England.....	June 23	June 30	3,291	Do.
Iris (tender), Lieut. HAYNE ELLIS, commanding. [Placed out of service (merchant complement) Oct. 15, 1909, at the navy-yard, Mare Island, Cal. Placed in commission (naval complement) Oct. 15, 1909, at the navy-yard, Mare Island, Cal.]	1909.	1909.		
Mare Island, Cal.....	Oct. 24	Oct. 24		Fitting out.
San Francisco, Cal.....	Nov. 1	Nov. 30	30	Tender to the Pacific Torpedo Fleet.
Magdalena Bay, Mexico.....	Dec. 5	Dec. 6	1,025	Do.
Santa Rosa Island.....	Dec. 6	Dec. 11	772	Do.
San Pedro, Cal.....	Dec. 6	Dec. 11	107	Do.
Mare Island, Cal.....	Dec. 13		387	Do.
Mare Island, Cal.....	1910.	1910.		
San Diego, Cal.....	Feb. 9	Feb. 1	494	Do. Do.
Iroquois (tug), Lieut. Commander STANFORD E. MOSES, commanding. Relieved by Lieut. Commander VICTOR S. HOUSTON, July 31, 1909. Relieved by Ensign ANTHONY J. JAMES, Jan. 29, 1910. [Placed out of commission Mar. 8, 1910, at the navy-yard, Mare Island, Cal.]	1910.	1910.		
Honolulu, Hawaii.....	Feb. 14	Feb. 15	2,100	Duty at the naval station, Hawaii. En route Mare Island to be placed out of commission.
Mare Island, Cal.....	Feb. 15		40	To be placed out of commission.
Isla de Cuba (gunboat).....				Loaned to the Naval Militia, Maryland.
Isla de Luzon (gunboat).....				Loaned to the Naval Militia, Louisiana.
Iwana (tug).....				Attached to the navy-yard, Boston, Mass.
Jamestown (wooden sailing vessel).				Transferred to the Marine-Hospital Service.
Jupiter (collier).....				Authorized to be built at the navy-yard, Mare Island, Cal.
Justin (collier).....				Collier service with the Pacific Fleet and Pacific Torpedo Fleet.
Kansas (battle ship), Capt. CHARLES J. BADGER, commanding. 1909.	1909.	1909.		
Provincetown, Mass.....	July 1	July 2		Preparing for target practice.
Boston, Mass.....	July 2	July 7	53	For Fourth of July.
Provincetown, Mass.....	July 7	Aug. 4	53	Preparing for target practice.
Hampton Roads, Va.....	Aug. 7	Aug. 9	600	With Atlantic Fleet.
Southern drill grounds.....	Aug. 9	Sept. 12	60	Target practice.
Hampton Roads, Va.....	Sept. 12	Sept. 20	60	Ordered to New York.
New York City.....	Sept. 22	Oct. 9	322	With Atlantic Fleet for the Hudson-Fulton Celebration.
Philadelphia, Pa.....	Oct. 11	Nov. 30	240	Under repair.
Southern drill grounds.....	Dec. 1	Dec. 4	129	With Atlantic Fleet.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1909.	1909.	<i>Knots.</i>	
Hampton Roads, Va.....	Dec. 4	Dec. 6	54	With Atlantic Fleet.
Southern drill grounds.....	Dec. 6	Dec. 10	226	Do.
Hampton Roads, Va.....	Dec. 10	Dec. 14	35	Do.
Southern drill grounds.....	Dec. 14	Dec. 16	64	Do.
Hampton Roads, Va.....	Dec. 16	Dec. 20	35	Do.
New York City.....	Dec. 22		316	Do.
	1910.	1910.		
New York City.....		Jan. 7		With Atlantic Fleet for holidays.
Guantanamo Bay, Cuba.....	Jan. 12	Mar. 24	1,367	With Atlantic Fleet for drills and exercises.
Hampton Roads, Va.....	Mar. 28	Apr. 4	1,118	With Atlantic Fleet.
Southern drill grounds.....	Apr. 4	Apr. 10	35	Preparing for and engaged in target practice with the Atlantic Fleet.
Hampton Roads, Va.....	Apr. 10	Apr. 15	279	Do.
Southern drill grounds.....	Apr. 15	Apr. 27	542	Do.
Philadelphia, Pa.....	Apr. 29		199	Under repair.
Katahdin (ram).....				At the navy-yard, Philadelphia, Pa., when stricken from the navy list.
[Stricken from the navy list and turned over to the Bureau of Ordnance for ballistic purposes July 9, 1909.]				
Kearsarge (battle ship), Capt. BENJAMIN TAPPAN, commanding.				At the navy-yard, Philadelphia, Pa.
[Placed out of commission Sept. 4, 1909, at the navy-yard, Philadelphia, Pa.]				
Kentucky (battle ship), Capt. BENJAMIN TAPPAN, commanding.				At the navy-yard, Norfolk, Va.
[Placed out of commission Aug. 28, 1909, at the navy-yard, Norfolk, Va.]				
Lamson (destroyer), Lieut. Commander JOHN M. LUBY, commanding.				Attached to the Atlantic Torpedo Fleet.
[Placed in commission Feb. 10, 1910, at the navy-yard, Philadelphia, Pa.]				
Lancaster (receiving ship), Capt. ALBERT MERTZ, commanding. Relieved by Lieut. GASTON D. JOHNSTONE, Nov. 17, 1909. Relieved by Capt. CHARLES E. FOX, Dec. 18, 1909. Relieved by Commander JOHN L. PURCELL, Mar. 21, 1910.				At the navy-yard, Philadelphia, Pa.
Lawrence (destroyer), Lieut. ALFRED G. HOWE, commanding. Relieved by Lieut. CHARLES S. KERRICK, July 27, 1909. Relieved by Lieut. MARTIN K. METCALF, Feb. 13, 1910.				Attached to the Pacific Torpedo Fleet.
Lebanon (collier).....				At the navy-yard, Norfolk, Va., fitting out at the end of the fiscal year.
[Placed out of service Oct. 2, 1909, at the navy-yard, Norfolk, Va. Placed in commission with a naval complement. Chief Boat-swain EDWARD J. NORCOTT, commanding, June 15, 1910, at the navy-yard, Norfolk, Va., for duty as range ship for the Atlantic Fleet.]				
Leonidas (collier).....				Collier service on the Atlantic coast and in the West Indies during the fiscal year.
Locust (tug).....				Attached to the United States naval coal depot, Tiburon, Cal.
[Placed on the navy list Apr. 5, 1910.]				

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Louisiana (battle ship), Capt. WASHINGTON I. CHAMBERS, commanding. Relieved by Lieut. Commander GEORGE B. BRADSHAW, Dec. 7, 1909. Relieved by Capt. ALBERT G. WINTERHALTER, Jan. 4, 1910.				
Provincetown, Mass.....	1909.	1909. July 2	<i>Knots.</i>	In company with Vermont and Kansas.
Boston, Mass.....	July 2	July 7	51	To give liberty.
Cape Cod Bay, Mass.....	July 7	July 10	75	With Atlantic Fleet for drills and exercises.
Provincetown, Mass.....	July 10	July 12	30	To give liberty.
Cape Cod Bay, Mass.....	July 12	July 13	30	Tactical diameter.
Provincetown, Mass.....	July 13	July 14	30	Night exercises.
Cape Cod Bay, Mass.....	July 14	July 17	30	With Atlantic Fleet.
Provincetown, Mass.....	July 17	July 20	30	Do.
Calibration range, off Provincetown, Mass.....	July 20	July 21	10	Calibrating.
Provincetown, Mass.....	July 21	do.....	10	Rejoined fleet.
Cape Cod Bay, Mass.....	July 28	July 31	30	Battle torpedo practice.
Provincetown, Mass.....	July 31	Aug. 4	30	With Atlantic Fleet.
Hampton Roads, Va.....	Aug. 7	Aug. 10	566	Do.
Southern drill grounds.....	Aug. 10	Aug. 14	50	Preparing for target practice.
Lynnhaven Bay.....	Aug. 14	Aug. 16	30	Bore sighting.
Southern drill grounds.....	Aug. 16	Aug. 27	30	Record target practice.
Hampton Roads, Va.....	Aug. 28	Aug. 29	50	Bore sighting.
Southern drill grounds.....	Aug. 29	Sept. 9	50	Battle practice.
Off Cape Henry.....	Sept. 9	Sept. 10	50	Mine practice.
Southern drill grounds.....	Sept. 10	Sept. 12	25	Division firing.
Hampton Roads, Va.....	Sept. 12	Sept. 21	55	To give liberty.
North River, New York City.....	Sept. 22	Oct. 5	295	With Atlantic Fleet for the Hudson-Fulton Celebration.
Hampton Roads, Va.....	Oct. 6	Oct. 6	266	En route Norfolk.
Navy-yard, Norfolk, Va.....	do.....	do.....	15	For repairs.
	1910.	1910.		
Navy-yard, Norfolk, Va.....		Feb. 3		Under repair.
Lynnhaven Roads, Va.....	Feb. 3	Feb. 4	25	Steaming trial. Proceeded to the rescue of the S. S. Kentucky, but was recalled.
Hampton Roads, Va.....	Feb. 5	Feb. 7	341	Adjusting machinery.
Lynnhaven Roads, Va.....	Feb. 7	Feb. 11	120	Duty in connection with experimental mount test.
Do.....	Feb. 11	Feb. 12	84	Do.
Hampton Roads, Va.....	Feb. 18	Feb. 21	1,382	Searching for the Nina.
Lynnhaven Roads, Va.....	Feb. 25	Feb. 26	462	In company with the Hianhval.
Hampton Roads, Va.....	Feb. 26	Mar. 3	45	For coal and stores.
Guantanamo Bay, Cuba.....	Mar. 7	Mar. 24	1,130	With the Atlantic Fleet for drills and exercises.
Hampton Roads, Va.....	Mar. 28	Apr. 4	1,126	With the Atlantic Fleet.
Southern drill grounds.....	Apr. 4	Apr. 11	36	Preparing for target practice.
Hampton Roads, Va.....	Apr. 11	Apr. 14	189	Bore sighting.
Southern drill grounds.....	Apr. 14	Apr. 29	39	Target practice.
Hampton Roads, Va.....	Apr. 29	Apr. 30	643	Ordered to navy-yard.
Norfolk, Va.....	Apr. 30	do.....	13	Under repair.
Maedonough (destroyer), Lieut. WILLIS G. MITCHELL, commanding.				At the navy-yard, Charleston, S. C.
[Placed in reserve Dec. 16, 1909, at the navy-yard, Charleston, S. C.]				
Machias (gunboat).....				Loaned to the Naval Militia, Connecticut.
Mackenzie (torpedo boat).....				At the navy-yard, Charleston, S. C.
Maine (battle ship), Capt. WILLIAM B. CAPERTON, commanding.				
[Placed out of commission Aug. 31, 1909, at the navy-yard, Portsmouth, N. H.]				
Gloucester, Mass.....	1909. July 1	1909. July 7		With Atlantic Fleet.
Provincetown, Mass.....	July 7	Aug. 5	51	Detached Atlantic Fleet.
Portsmouth, N. H.....	Aug. 5	do.....	72	Preparing to go out of commission.
Manila (prison ship).....				At the navy-yard, Mare Island, Cal.
Manly (torpedo boat).....				At the Naval Academy, Annapolis, Md.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
			<i>Knots.</i>	
Marblehead (cruiser, third class) [Placed in commission and turned over to the California Naval Militia Mar. 31, 1910, at the navy-yard, Mare Island, Cal.]				Loaned to the Naval Militia, California.
Marcellus (collier)				Collier service on the Atlantic coast.
Marietta (gunboat), Commander FRANK K. HILL, commanding. Relieved by Commander GEORGE F. COOPER, June 20, 1910.				
	1909.	1909.		
Cristobal, Isthmian Canal Zone	July 3	July 2		For coal.
Bocas del Toro, Panama	July 3	July 4	144	General service.
Port Limon, Costa Rica	July 4	July 6	65	Do.
Bluefields, Nicaragua	July 7	July 21	126	Do.
Cristobal, Isthmian Canal Zone	July 22	July 23	274	For coal.
Guantanamo Bay, Cuba	July 27	July 29	693	Do.
Portsmouth, N. H.	Aug. 6	Sept. 30	1,490	For repairs and docking.
Tompkinsville, N. Y.	Oct. 2	Oct. 3	385	En route Iona Island.
Iona Island, N. Y.	Oct. 3	do.	44	For ammunition.
Tompkinsville, N. Y.	do.	Oct. 7	44	Ordered Guantanamo.
Hampton Roads, Va.	Oct. 9	Oct. 19	278	Do.
Guantanamo Bay, Cuba	Oct. 23	Oct. 30	1,106	En route target grounds.
Target grounds, Cape Cruz, Cuba	Oct. 31	Nov. 11	187	Target practice.
Guantanamo Bay, Cuba	Nov. 12	Nov. 14	187	Do.
Target grounds, Cape Cruz, Cuba	Nov. 15	Nov. 18	187	Do.
Guantanamo Bay, Cuba	Nov. 19	Nov. 21	187	For coal and stores.
Port Limon, Costa Rica	Nov. 24	Nov. 26	833	General service.
Do.	Nov. 28	Nov. 29	228	Searching for missing whaleboat and crew.
Bocas del Toro, Panama	Nov. 29	Nov. 30	64	Do.
Port Limon, Costa Rica	Nov. 30	Dec. 2	64	Do.
Bocas del Toro, Panama	Dec. 2	Dec. 3	64	Do.
Cristobal, Isthmian Canal Zone	Dec. 3		103	Overhauling, coal and stores.
	1910.	1910.		
Cristobal, Isthmian Canal Zone	Jan. 4	Jan. 4		General service on the east coast of Central America, protecting American interests, etc.
Bocas del Toro, Panama	Jan. 5	Jan. 6	141	Do.
Port Limon, Costa Rica	Jan. 6	Jan. 7	64	Do.
Bluefields, Nicaragua	Jan. 8	Jan. 17	131	Do.
Little Corn Island, Nicaragua	Jan. 17	Jan. 25	44	Do.
Bluefields, Nicaragua	Jan. 25	Jan. 26	44	Do.
Cristobal, Isthmian Canal Zone	Jan. 27	Jan. 28	274	Do.
Little Corn Island, Nicaragua	Jan. 29	Jan. 29	246	Do.
Mobile, Ala.	Feb. 3	Feb. 9	1,162	Department's orders.
Tampa, Fla.	Feb. 11	Feb. 27	386	Do.
Key West, Fla.	Feb. 28	Mar. 1	252	Do.
Hampton Roads, Va.	Mar. 4	Mar. 14	915	Ordered to the navy-yard, Portsmouth, N. H.
Portsmouth, N. H.	Mar. 16		560	Under repair.
Mars (collier)				Collier service on the Atlantic coast, West Indies, and South America.
[Placed in service Aug. 26, 1909, at the navy-yard, Norfolk, Va.]				
Maryland (armored cruiser), Commodore MOSES L. WOOD, retired, commanding. Relieved by Lieut. Commander WILLIAM A. MOFFETT, July 29, 1909. Relieved by Capt. JAMES C. GILLMORE, Aug. 12, 1909.				
	1909.	1909.		
Mare Island, Cal.	July 30	July 30		Under repair.
Hunters Point, Cal.	Aug. 5	Aug. 5	29	To dock ship.
Mare Island, Cal.	Aug. 5	Aug. 14	26	
San Francisco, Cal.	Aug. 14	Aug. 15	23	With West Virginia, South Dakota, and California.
Seattle, Wash.	Aug. 18	Aug. 23	898	Duty in connection with the exposition.
Do.	Aug. 23	Aug. 28	78	Standardizing propellers.
Mare Island, Cal.	Aug. 31	Sept. 3	830	For coal.
San Francisco, Cal.	Sept. 3	Sept. 5	22	Joined First Squadron, Pacific Fleet.
Honolulu, Hawaii.	Sept. 10	Sept. 20	2,100	Cruising with the armored cruisers of the Pacific Fleet.
Maalaea Bay, Hawaii.	Sept. 20	Sept. 21	87	Full-power speed trial.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1909.	1909.	<i>Knots.</i>	
Maalaea Bay, Hawaii	Sept. 21	Sept. 23	135	In company with West Virginia.
Kalakekua Bay, Hawaii	Sept. 23	Sept. 24	90	Do.
Honolulu, Hawaii	Sept. 24	Oct. 5	165	In company with the First Squadron of the Pacific Fleet.
Nares Harbor, Admiralty Islands..	Oct. 17	Oct. 25	3,587	Cruising with the First Squadron of the Pacific Fleet.
Manila, P. I.	Oct. 30	Nov. 4	1,920	Do.
Cavite, P. I.	Nov. 4	Nov. 6	4	To coal ship.
Subig Bay, P. I.	Nov. 6	Nov. 9	60	Calibration practice.
Off Point Binanga, P. I.	Nov. 9	Nov. 10	7	Making passage.
Target range, Manila Bay, P. I.	Nov. 10	Nov. 21	45	Preparing for target practice.
Subig Bay, P. I.	Nov. 21	Nov. 23	35	Do.
Off Point Binanga, P. I.	Nov. 23	Nov. 24	78	Preliminary day practice.
Subig Bay, P. I.	Nov. 24	Dec. 1	75	In dry dock, etc.
Cavite, P. I.	Dec. 1	Dec. 5	60	To coal ship.
Subig Bay, P. I.	Dec. 5	Dec. 6	60	Division firing.
Manila, P. I.	Dec. 6	Dec. 10	140	Coaling.
Kobe, Japan	Dec. 15	Dec. 18	1,590	With Colorado.
Nagasaki, Japan	Dec. 19	Dec. 30	400	Do.
	1910.	1910.		
Shanghai, China	Jan. 1	Jan. 14	451	Do.
Yokohama, Japan	Jan. 17	Jan. 20	1,051	With Pacific Fleet.
Honolulu, Hawaii	Jan. 31	Feb. 8	3,553	Do.
San Francisco, Cal.	Feb. 14	Mar. 1	2,080	Do.
Santa Barbara Channel, Cal.	Mar. 2	Mar. 17	290	Preparing for target practice.
Mare Island, Cal.	Mar. 18	Mar. 20	.....	.....
San Francisco, Cal.	Mar. 20	Mar. 22	.....	.....
Santa Barbara Channel, Cal.	Mar. 23	Apr. 3	.....	Target practice.
Capitola, Cal.	Apr. 4	Apr. 6	222	In company with California.
Mare Island, Cal.	Apr. 7	.....	104	Under repair.
Massachusetts (battle ship), Com- mander CARLO B. BRITAIN, com- manding.				
[Placed in commission Apr. 28, 1910, at the navy-yard, New York.]				
	1910.	1910.		
Navy-yard, New York .....	.....	May 10	.....	Fitting out.
Annapolis, Md.	May 13	June '6	375	To join the Naval Academy Practice Squadron.
Hampton Roads, Va.	June 6	June 9	145	Cruising with the Naval Academy Practice Squadron.
Plymouth, England	June 23	June 30	3,265	Do.
Massasoit (tug)				At the naval station, Key West, Fla.
Mayflower (dispatch boat), Com- mander THOMAS SNOWDEN, commanding. Relieved by Com- mander GEORGE W. LOGAN, Feb. 1, 1910.				
	1909.	1909.		
Washington, D. C. ....	.....	Aug. 6	.....	Awaiting orders.
Boston, Mass.	Aug. 8	Aug. 11	543	To await orders of the President.
Lanesville, Mass.	Aug. 11	Aug. 12	50	On lookout for the tug Nezinscot, which was lost.
Boston, Mass.	Aug. 12	Sept. 8	50	To await orders of the President.
Beverly, Mass.	Sept. 8	Sept. 10	25	Gave luncheon on board to partici- pants of Sonder class races.
Boston, Mass.	Sept. 10	Sept. 15	25	Ordered to New York for Hudson- Fulton celebration.
North River, New York City	Sept. 16	Nov. 13	278	For the Hudson-Fulton celebration.
Washington, D. C.	Nov. 15	Nov. 18	427	Awaiting orders.
Norfolk, Va.	Nov. 19	Nov. 20	186	President Taft and party on board.
Old Point, Va.	Nov. 20	.....	11	Do.
Washington, D. C. ....	.....	Dec. 21	177	Awaiting orders.
San Juan, Porto Rico	Dec. 26	.....	1,299	Secretary of War and party on board.
	1910.	1910.		
Do. ....	.....	Jan. 3	.....	With the Secretary of War on board.
Santo Domingo City	Jan. 4	Jan. 4	242	Do.
Santiago de Cuba	Jan. 6	Jan. 6	425	Do.
Habana, Cuba	Jan. 8	Jan. 10	630	Do.
Charleston, S. C.	Jan. 13	Jan. 13	680	Do.
Washington, D. C.	Jan. 15	Mar. 16	572	Awaiting orders.
Hampton Roads, Va.	Mar. 17	Mar. 17	177	Transporting remains of Señor Nabuco, late ambassador from Brazil, to Hampton Roads for further transfer to the North Carolina for passage to Brazil.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
Washington, D. C.....	Mar. 18	Apr. 29	177	Awaiting orders.
Mount Vernon, Va.....	Apr. 29	.....do.....	12	Conveying Prince Tsai Tao and party to Mount Vernon and return. Ordered to hold target practice. En route to target grounds.
Washington, D. C.....	.....do.....	Apr. 30	12	Do.
Piney Point, Md.....	Apr. 30	May 4	79	Held target practice.
Lynnhaven Bay.....	May 4	May 5	83	Returning to Washington.
Southern drill grounds.....	May 5	May 7	40	Awaiting orders.
Alexandria, Va.....	May 7	May 8	197	5
Washington, D. C.....	May 8	June 27	5	Special duty.
Boston, Mass.....	June 29		654	
Mayrant (destroyer).....				Under construction at the works of William Cramp & Sons, Philadelphia, Pa.
McCall (destroyer).....				Under construction at the works of the New York Shipbuilding Co., Camden, N. J.
McKee (torpedo boat).....				At the torpedo station, Newport, R. I.
Miantonomoh (monitor).....				At the navy-yard, Philadelphia, Pa.
Michigan (battle ship), Capt. NATHANIEL R. USHER, commanding. [Placed in commission Jan. 4, 1910, at the navy-yard, Philadelphia, Pa.]				
	1910.	1910.		
Philadelphia, Pa.....	Jan. 15	Jan. 15		Fitting out.
Hampton Roads, Va.....	Jan. 16	Jan. 17	220	On "shaking down" cruise.
Culebra, Virgin Islands.....	Jan. 22	Feb. 9	1,291	Do.
St. Thomas, Danish West Indies.....	Feb. 10	Feb. 14	236	Do.
Culebra, Virgin Islands.....	Feb. 14	Feb. 18	68	Do.
Hampton Roads, Va.....	Feb. 22	Mar. 4	1,293	Preparing for final trials.
Do.....	Mar. 6	Mar. 13	617	Completed final trials.
Off Cape Lookout, N. C.....	Mar. 14	Mar. 25	237	Awaiting arrival of the Atlantic Fleet.
Off Cape Henry, Va.....	Mar. 26	Mar. 28	210	Joined Atlantic Fleet on Mar. 28.
Hampton Roads, Va.....	Mar. 28	Apr. 4	28	With Atlantic Fleet.
Southern drill grounds.....	Apr. 4	Apr. 11	32	Preparing for target practice.
Hampton Roads, Va.....	Apr. 11	Apr. 15	32	Bore sighting.
Southern drill grounds.....	Apr. 15	Apr. 27	569	Held elementary target practice.
Hampton Roads, Va.....	Apr. 28	Apr. 28	32	En route Norfolk yard.
Navy-yard, Norfolk, Va.....	.....do.....	Apr. 30		To dock ship.
Hampton Roads, Va.....	Apr. 30	.....do.....		Coaled ship.
Tompkinsville, N. Y.....	May 1	May 2	243	En route navy-yard, New York.
Navy-yard, New York.....	May 2	May 11	6	To install tachometer.
Rockland, Me.....	May 13	May 22	432	For standardization runs on trial course.
Provincetown, Mass.....	May 22	May 28	200	Do.
Lewes, Del.....	May 29	June 5	403	Do.
Tompkinsville, N. Y.....	June 6	June 7	168	En route navy-yard, New York.
Navy-yard, New York.....	June 7	.....do.....	6	For repairs.
Milwaukee (cruiser, first class), Lieut. Commander DE WITT BLAMER, commanding. Relieved by Lieut. Commander MONTGOMERY M. TAYLOR, Oct. 23, 1909. Relieved by Commander EDWARD W. EBERLE, Jan. 24, 1910. [Placed out of commission May 3, 1910, at the navy-yard, Bremer-ton, Wash.]				At the navy-yard, Bremerton, Wash.
Mindoro (gunboat), Lieut. CHANDLER K. JONES, commanding. Relieved by Lieut. CHARLES M. BAUM, Dec. 18, 1909.				
	1909.	1909.		
Jolo, Jolo, P. I.....	July 3	July 3		Cruising in the waters of the southern Philippines.
Zamboanga, P. I.....	July 3	July 7	78	Do.
Caldera Bay, P. I.....	July 7	.....do.....	7	Do.
Zamboanga, P. I.....	.....do.....	July 8	7	Do.
Masinglog, P. I.....	July 8	.....do.....	7	Do.
Zamboanga, P. I.....	.....do.....	July 9	7	Do.
Fort Isabela, P. I.....	July 9	.....do.....	15	Do.
Makuso Bay, P. I.....	.....do.....	July 10	20	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Guion (Basilan), P. I.	1909. July 10	1909. July 10	<i>Knots.</i> 14	Cruising in the waters of the southern Philippines.
Amuluy (Basilan), P. I.	..do.	..do.	6.5	Do.
Behelbung (Basilan), P. I.	..do.	July 11	11.5	Do.
Gubuan River, Basilan, P. I.	July 11	..do.	22.5	Do.
Zamboanga, P. I.	..do.	July 14	14.5	Do.
Port Isabela, P. I.	July 14	July 15	15	Do.
Jolo, Jolo, P. I.	July 15	July 16	68	Do.
Port Isabela, P. I.	July 16	July 17	68	Do.
Zamboanga, P. I.	July 17	July 26	15	Do.
Little Santa Cruz Light, P. I.	July 26	..do.	3	Do.
Port Isabela, P. I.	..do.	July 27	11	Do.
Mataja Island Light, P. I.	July 27	..do.	19	Do.
Pilas Island, P. I.	..do.	July 28	13	Do.
Tamula Island, P. I.	July 28	..do.	23.5	Do.
Port Isabela, P. I.	..do.	..do.	24.5	Do.
Zamboanga, P. I.	..do.	Aug. 1	15	Do.
Lampingan Island, P. I.	Aug. 1	..do.	20.5	Do.
Zamboanga, P. I.	..do.	Aug. 3	20.5	Do.
Port Isabela, P. I.	Aug. 3	..do.	15	Do.
Maluso Bay, P. I.	..do.	..do.	20	Do.
Taketa Island, P. I.	..do.	..do.	4	Do.
Tamuk Island, P. I.	..do.	..do.	5	Do.
Guion, Basilan, P. I.	..do.	..do.	13	Do.
Taplanta Island, P. I.	..do.	Aug. 4	8	Do.
Lanahuan Island, P. I.	Aug. 4	..do.	1.5	Do.
Bubnan Island, P. I.	..do.	..do.	2	Do.
Salupin Island, P. I.	..do.	..do.	5	Do.
Dipolod Island, P. I.	..do.	Aug. 5	20.5	Do.
Tavilan, P. I.	Aug. 5	..do.	7	Do.
Tonquil, P. I.	..do.	..do.	7	Do.
Jolo, Jolo, P. I.	..do.	Aug. 7	51	Do.
Do.	Aug. 7	Aug. 8	71	Do.
Port Isabela, P. I.	Aug. 8	..do.	65.5	Do.
Zamboanga, P. I.	..do.	Aug. 10	15	Do.
Jolo, Jolo, P. I.	Aug. 11	Aug. 11	78	Do.
Patlan Island, P. I.	..do.	Aug. 12	29	Do.
Zamboanga, P. I.	Aug. 12	Aug. 18	90	Do.
Jolo, Jolo, P. I.	Aug. 19	Aug. 19	78	Do.
Parangan Island, P. I.	..do.	Aug. 20	53	Do.
South Ublan Island, P. I.	Aug. 20	..do.	10	Do.
Bongao, P. I.	..do.	Aug. 21	55	Do.
Noche Buena Channel, P. I.	Aug. 21	Aug. 23	67	Do.
Jolo, Jolo, P. I.	Aug. 23	Sept. 2	58.5	Do.
Port Isabela, P. I.	Sept. 3	Sept. 6	65.5	Do.
Zamboanga, P. I.	..do.	..do.	15	Do.
Port Isabela, P. I.	..do.	Sept. 16	15	Do.
Zamboanga, P. I.	Sept. 16	Sept. 17	15	Do.
Port Isabela, P. I.	Sept. 17	Sept. 23	15	Do.
Zamboanga, P. I.	..do.	..do.	15	Do.
Port Isabela, P. I.	..do.	Sept. 24	15	Do.
Jolo, Jolo, P. I.	Sept. 24	Sept. 26	65.5	Do.
Sandakan, B. N. B., P. I.	Sept. 27	Sept. 28	182	Do.
Cagayan, Sulu, P. I.	Sept. 29	Sept. 29	73	Do.
Balabac, P. I.	Sept. 30	Oct. 1	109	Do.
Batang Point, Balambangan Island, P. I.	Oct. 1	Oct. 2	44	Do.
Tigabu Island, P. I.	Oct. 2	Oct. 3	49	Do.
Sandakan, B. N. B., P. I.	Oct. 3	Oct. 5	84	Do.
Jolo, P. I.	Oct. 6	Oct. 10	182	Do.
Zamboanga, P. I.	Oct. 10	Oct. 12	78	Do.
Jolo, P. I.	Oct. 12	Oct. 19	78	Do.
Lagasan, P. I.	Oct. 19	..do.	26	Do.
Patlan Island, P. I.	..do.	..do.	7.5	Do.
Siasi, P. I.	..do.	Oct. 20	25	Do.
Jolo, P. I.	Oct. 20	Oct. 22	37	Do.
Dairymple Harbor, P. I.	Oct. 22	Oct. 24	23	Do.
Jolo, P. I.	Oct. 24	..do.	23	Do.
Zamboanga, P. I.	Oct. 25	Oct. 27	28	Do.
Jolo, P. I.	Oct. 27	Oct. 30	78	Do.
Bongao, P. I.	Oct. 31	Nov. 4	103	Do.
Jolo, P. I.	Nov. 4	Nov. 10	103	Do.
Zamboanga, P. I.	Nov. 11	Nov. 13	78	Do.
Jolo, P. I.	Nov. 13	Nov. 15	80.5	Do.
Pangasinan Island, P. I.	Nov. 15	Nov. 18	28.5	Subcaliber practice.
Jolo, P. I.	Nov. 18	Nov. 19	29	Cruising in the waters of the southern Philippines.
East Bolod Island, P. I.	Nov. 19	Nov. 20	40	Do.
Zamboanga, P. I.	Nov. 20	Nov. 22	55	Do.
Santa Cruz Bank, P. I.	Nov. 22	Nov. 24	2.5	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Zamboanga, P. I.	1909. Nov. 24	1909. Nov. 26	<i>K</i> nots. 2.5	Cruising in the waters of the southern Philippines.
Caldera Bay, P. I.	Nov. 26	do.	7	Do.
Zamboanga, P. I.	do.	Nov. 28	7	Do.
Basilan Strait, P. I.	Nov. 28	do.	7	Do.
Zamboanga, P. I.	do.	Nov. 29	7	Do.
Basilan Strait, P. I.	Nov. 29	do.	9	Do.
Zamboanga, P. I.	do.	Dec. 4	9	Do.
Port Isabela, P. I.	Dec. 4	do.	15	Do.
Gubanan River, P. I.	do.	Dec. 5	15	Do.
Behelbung, P. I.	Dec. 5	do.	22.5	Do.
Jolo, P. I.	do.	Dec. 6	80	Do.
Zamboanga, P. I.	Dec. 7	Dec. 10	119	Do.
Jolo, P. I.	Dec. 11	Dec. 11	78	Do.
Zamboanga, P. I.	Dec. 12	Dec. 12	78	Do.
Cavite, P. I.	Dec. 15	Dec. 15	506	Under repair.
Cavite, P. I.	1910. Mar. 7	1910. Mar. 7		Undergoing repairs.
Olongapo, P. I.	Mar. 7	Mar. 27	62	Target practice.
Cavite, P. I.	Mar. 27	Apr. 9	62	Under repair.
Zamboanga, P. I.	Apr. 13	Apr. 14	500	Cruising in the waters of the southern Philippines.
Jolo, P. I.	Apr. 15	Apr. 15	84	Do.
Cagayan Sulu, P. I.	Apr. 16	Apr. 16	162	Do.
Sandakan, B. N. B., P. I.	do.	Apr. 18	73	Do.
Cagayan Sulu, P. I.	Apr. 18	May 8	73	Do.
Sandakan, B. N. B., P. I.	May 8	May 9	73	Do.
Jolo, P. I.	May 10	May 10	172	Do.
Zamboanga, P. I.	May 11	May 12	84	Do.
Jolo, P. I.	May 13	May 14	84	Do.
Cavite, P. I.	May 18	June 4	572	Undergoing repairs.
Zamboanga, P. I.	June 7	June 13	520	Cruising in the waters of the southern Philippines.
Jolo, P. I.	June 14	June 16	84	Do.
Zamboanga, P. I.	June 16	June 18	84	Do.
Isabela de Basilan, P. I.	June 18	June 19	14	Do.
Zamboanga, P. I.	June 19	June 21	14	Do.
Jolo, P. I.	June 22	June 22	84	Do.
Siasi, P. I.	do.	June 23	42	Do.
Bongso, P. I.	June 23	June 25	84	Do.
Parangan, P. I.	June 25	June 26	37	Do.
Montabuan, P. I.	June 26	June 27	16	Do.
Siasi, P. I.	June 27	June 28	55	Do.
Jolo, P. I.	June 28	do.	37	Do.
Zamboanga, P. I.	do.	do.	84	Do.
Minneapolis (cruiser, second class).				At the navy-yard, Philadelphia, Pa.
Minnesota (battle ship), Commander WILLIAM S. SIMS, commanding.				
Marblehead, Mass.	1909. July 1	1909. July 7		For the Fourth of July.
Provincetown, Mass.	July 11	Aug. 4	164	With Atlantic Fleet preparing for target practice.
Hampton Roads, Va.	Aug. 7	Aug. 11	293	With Atlantic Fleet.
Southern drill grounds.	Aug. 11	Aug. 14	57	Target practice.
Hampton Roads, Va.	Aug. 15	Aug. 16	57	Bore sighting.
Southern drill grounds.	Aug. 16	Aug. 21	57	Record target practice.
Hampton Roads, Va.	Aug. 21	Aug. 22	57	Bore sighting.
Southern drill grounds.	Aug. 23	Sept. 5	57	Battle practice.
Hampton Roads, Va.	Sept. 5	do.	57	Received supply of water.
Southern drill grounds.	Sept. 6	Sept. 12	57	Night battle practice.
Hampton Roads, Va.	Sept. 12	Sept. 20	57	Coaled ship.
New York City.	Sept. 22	Oct. 5	307	With Atlantic Fleet for the Hudson-Fulton Celebration.
Norfolk, Va.	Oct. 6	Dec. 1	292	Under repair.
Southern drill grounds.	Dec. 1	Dec. 4	50	With Atlantic Fleet.
Hampton Roads, Va.	Dec. 4	Dec. 6	40	To give liberty.
Southern drill grounds.	Dec. 6	Dec. 10	40	With Atlantic Fleet.
Hampton Roads, Va.	Dec. 10	Dec. 14	40	To give liberty.
Southern drill grounds.	Dec. 14	Dec. 16	40	With Atlantic Fleet.
Hampton Roads, Va.	Dec. 16	Dec. 20	40	Coaling ship.
North River, New York City.	Dec. 22		313	With Atlantic Fleet to spend Christmas holidays.
New York City.	1910. Jan. 7	1910. Jan. 7		With Atlantic Fleet.
Guantanamo Bay, Cuba.	Jan. 12	Mar. 24	1,323	With Atlantic Fleet engaged in drills and exercises.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
Hampton Roads, Va.....	Mar. 28	Apr. 4	1,085	With Atlantic Fleet.
Southern drill grounds.....	Apr. 4	Apr. 11	359	Preparing for target practice.
Hampton Roads, Va.....	Apr. 11	Apr. 15	87	Bore sighting.
Southern drill grounds.....	Apr. 15	Apr. 28	840	Target practice.
Hampton Roads, Va.....	Apr. 28	Apr. 29	101	Ordered to navy-yard.
Norfolk, Va.....	Apr. 29	.....	10	Under repair.
Mississippi (battle ship), Capt. JOHN C. FREMONT, commanding. Relieved by Lieut. Commander SUMNER E. W. KITTELLE, Dec. 19, 1909. Relieved by Capt. WILLIAM F. FULLAM, Dec. 30, 1909.				
	1909.	1909.		
Eastport, Me.....	July 6	July 6	.....	For the Fourth of July.
Cape Cod Bay, Mass.....	July 7	July 10	357	Subcaliber practice.
Provincetown, Mass.....	July 10	July 15	178	To give liberty.
Cape Cod Bay, Mass.....	July 15	July 17	212	With Atlantic Fleet preparing for target practice.
Provincetown, Mass.....	July 17	July 19	46	To give liberty.
Cape Cod Bay, Mass.....	July 19	July 24	51	Preparing for target practice.
Provincetown, Mass.....	July 24	July 27	266	To give liberty.
Cape Cod Bay, Mass.....	July 27	July 31	83	Preparing for target practice.
Provincetown, Mass.....	July 31	Aug. 4	235	To give liberty.
Hampton Roads, Va.....	Aug. 7	Aug. 9	717	Coaled ship.
Southern drill grounds.....	Aug. 9	Aug. 19	68	Record target practice.
Hampton Roads, Va.....	Aug. 19	Aug. 21	162	
Southern drill grounds.....	Aug. 21	Sept. 6	68	Night and day battle practice.
Lynnhaven Bay, Va.....	Sept. 6	Sept. 7	527	
Hampton Roads, Va.....	Sept. 7	.....do	16	
Southern drill grounds.....	.....do	Sept. 12	63	Leading ship for New Hampshire.
Hampton Roads, Va.....	Sept. 12	Sept. 20	115	Ordered to New York.
Ambrose Channel light-ship.....	Sept. 21	Sept. 22	294	En route to New York.
North River, New York City.....	Sept. 22	Oct. 4	34	With Atlantic Fleet for the Hudson-Fulton celebration.
Philadelphia, Pa.....	Oct. 5	Oct. 20	244	For repairs.
New Orleans, La.....	Oct. 26	Nov. 2	1,098	In connection with the Lakes to the Gulf convention.
Philadelphia, Pa.....	Nov. 7	.....	1,083	For repairs.
	1910.	1910.		
Philadelphia, Pa.....	.....	Jan. 5	.....	Under repair.
Guantanamo Bay, Cuba.....	Jan. 12	Mar. 24	1,354	With Atlantic Fleet engaged in drills and exercises.
Hampton Roads, Va.....	Mar. 28	Apr. 4	1,100	With Atlantic Fleet.
Southern drill grounds.....	Apr. 4	Apr. 28	36	Holding target practice.
Hampton Roads, Va.....	Apr. 28	.....do	70	Ordered to yard.
Philadelphia, Pa.....	Apr. 29	.....	260	Under repair.
Missouri (battle ship), Capt. ROBERT M. DOYLE, commanding. Relieved by Capt. WILLIAM R. RUSH, Jan. 3, 1910. Relieved by Lieut. Commander HERBERT G. GATES, Mar. 14, 1910. Relieved by Capt. WILLIAM S. BENSON, May 4, 1910.				
[Placed in reserve May 2, 1910, at the navy-yard, Boston, Mass.]				
	1909.	1909.		
Boston, Mass.....	.....	Aug. 31	.....	Under repair.
Provincetown, Mass.....	Aug. 31	Sept. 2	53	For calibration practice.
Hampton Roads, Va.....	Sept. 4	Sept. 6	525	Preparing for target practice.
Southern drill grounds.....	Sept. 6	Sept. 17	59	Target practice with Atlantic Fleet.
Hampton Roads, Va.....	Sept. 17	Sept. 20	50	To coal ship.
North River, New York City.....	Sept. 21	Oct. 5	258	With the Atlantic Fleet for the Hudson-Fulton celebration.
Boston, Mass.....	Oct. 7	Nov. 12	390	To dock and repair ship.
Bradford, R. I.....	Nov. 13	Nov. 16	285	To coal ship.
Newport, R. I.....	Nov. 16	Nov. 22	7	Torpedo drill.
Tompkinsville, N. Y.....	Nov. 23	Nov. 26	160	To receive ammunition.
Hampton Roads, Va.....	Nov. 27	Dec. 1	275	To rejoin flag.
Southern drill grounds.....	Dec. 1	Dec. 4	30	Maneuvering with Atlantic Fleet.
Hampton Roads, Va.....	Dec. 4	Dec. 6	30	At anchor with Atlantic Fleet.
Southern drill grounds.....	Dec. 6	Dec. 10	30	Maneuvering with Atlantic Fleet.
Hampton Roads, Va.....	Dec. 10	Dec. 14	30	At anchor with Atlantic Fleet.
Southern drill grounds.....	Dec. 14	Dec. 16	30	Maneuvering with Atlantic Fleet.
Hampton Roads, Va.....	Dec. 16	Dec. 20	30	At anchor with Atlantic Fleet.
New York City.....	Dec. 22	.....	.....	With Atlantic Fleet to spend holidays.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
New York City.....	Jan. 12	Jan. 7		With Atlantic Fleet.
Guantanamo Bay, Cuba.....	Jan. 12	Mar. 24	1,351	With Atlantic Fleet engaged in drills and exercises.
Hampton Roads, Va.....	Mar. 28	Apr. 4	994	With Atlantic Fleet.
Southern drill grounds.....	Apr. 4	Apr. 11	53	With Atlantic Fleet preparing for target practice.
Hampton Roads, Va.....	Apr. 11	Apr. 15	242	To bore sight.
Southern drill grounds.....	Apr. 15	Apr. 27	30	Target practice with Atlantic Fleet.
Hampton Roads, Va.....	Apr. 27	Apr. 29	677	To transfer men.
Boston, Mass.....	May 1		564	Under repair.
Moccasin (submarine), Lieut. OSCAR F. COOPER, commanding. Relieved by Ensign ERNEST D. MCWHORTER, Mar. 14, 1910. [Placed out of commission July 26, 1909, at the navy-yard, Norfolk, Va. Placed in commission Feb. 10, 1910, at the naval station, Olongapo, P. I.]				Attached to the Asiatic Torpedo Fleet. The Moccasin was transported to the Philippines on board the Caesar.
Modoc (tug).....				At the navy-yard, Philadelphia, Pa.
Mohawk (tug).....				At the navy-yard, Norfolk, Va.
Mohican (tender), Lieut. Commander OSCAR W. KOESTER, commanding. Relieved by Commander GEORGE R. SALISBURY, Nov. 13, 1909. Relieved by Ensign ARTHUR W. SEARS, Feb. 1, 1910. Relieved by Commander CHESTER M. KNEPPER, Feb. 21, 1910. Relieved by Ensign ARTHUR W. SEARS, Mar. 18, 1910.				Tender to the First Submarine Division, Asiatic Torpedo Fleet.
Monadnock (monitor).....				At the naval station, Cavite, P. I.
Monaghan (destroyer).....				Under construction at the works of the Newport News Shipbuilding Co., Newport News, Va.
Montana (armored cruiser), Capt. ALFRED REYNOLDS, commanding. Relieved by Capt. JOHN G. QUINAY, Nov. 27, 1909.	1909.	1909.		
Smyrna, Asia Minor.....	July 10	July 7		Protecting American interests.
Naples, Italy.....	July 10	July 17	1,070	In company with the North Carolina and New York.
Gibraltar	July 20	July 23	980	Squadron ordered to United States.
Boston, Mass.....	Aug. 3	Aug. 6	3,315	Coaled ship.
Provincetown, Mass.....	Aug. 6	Aug. 22	45	Target practice.
Hampton Roads, Va.....	Aug. 24	Aug. 26	530	Receiving stores and ammunition.
Southern drill grounds.....	Aug. 26	Sept. 2	50	Record target practice.
Hampton Roads, Va.....	Sept. 2	Sept. 5	50	Coaled ship.
Southern drill grounds.....	Sept. 5	Sept. 8	50	Record target practice.
Lynnhaven Bay.....	Sept. 8	Sept. 9	40	Bore sighting.
Southern drill grounds.....	Sept. 9	Sept. 15	40	Battle practice.
Hampton Roads, Va.....	Sept. 15	Sept. 21	50	Cleaning and painting ship.
Delaware Break water.....	Sept. 22	Sept. 23	173	Attending celebration at Lewes.
North River, New York City.....	Sept. 24	Oct. 4	160	With Atlantic Fleet for the Hudson-Fulton Celebration.
Hampton Roads, Va.....	Oct. 5	Oct. 5	301	En route Norfolk yard.
Norfolk, Va.....	do.	Oct. 19	12	For repairs and alterations.
Hampton Roads, Va.....	Oct. 19	Oct. 20	12	Ordered to New Orleans.
Pilot Town, La.....	Oct. 26	Oct. 27	1,450	En route to New Orleans.
New Orleans, La.....	Oct. 27	Nov. 2	90	For the Deep Waterways Convention.
Hampton Roads, Va.....	Nov. 7	Nov. 7	1,540	En route to Norfolk.
Norfolk, Va.....	do.		12	For repairs.
Do.....	1910.	1910.		
Hampton Roads, Va.....	Mar. 31	Apr. 1	10	Under repair.
Do.....	Apr. 2	Apr. 8	207	Preparing for trial run.
Habana, Cuba.....	Apr. 11	Apr. 14	1,021	Trial run, testing submarine signal apparatus.
St. Thomas, Danish West Indies...	Apr. 17	Apr. 18	1,044	En route South America with the Special Service Squadron.
Port of Spain, Trinidad.....	Apr. 20	Apr. 24	514	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Maldonado, Uruguay.....	1910. May 7	1910. May 9	<i>Knots.</i> 4,241	To take part in the Argentine Centennial Celebration.
Montevideo, Uruguay.....	May 9	May 13	57	Do.
Bahia Blanca, Argentina.....	May 15	June 5	478	Do.
Montevideo, Uruguay.....	June 7	June 14	510	To obtain provisions.
Rio de Janeiro, Brazil.....	June 17	June 20	1,030	Held four-hour full-speed trial.
Do.....	June 20	June 30		En route to the United States with the Special Service Squadron.
Monterey (monitor), Commander LEVI C. BERTOLETTE, commanding. Relieved by Lieut. FREDERICK J. HORNE, Oct. 16, 1909. Relieved by Commander GEORGE R. SALISBURY, Nov. 18, 1909. Relieved by Lieut. FREDERICK J. HORNE, Feb. 1, 1910. Relieved by Commander CHESTER M. KNEPPER, Feb. 21, 1910. Relieved by FREDERICK J. HORNE, Apr. 18, 1910.				In reserve at the naval station, Olongapo, P. I.
Montgomery (torpedo experimental ship), Commander JOSEPH STRAUSS, commanding. Relieved by Commander VOLNEY O. CHASE, May 3, 1910.				
Rockland, Me.....	1909. July 1	1909. July 6		To spend Fourth of July.
Cape Cod Bay.....	July 7	July 15	127	Experimental work.
Boston, Mass.....	July 15	July 17	47	Do.
Cape Cod Bay.....	July 17	July 31	31	Do.
Newport, R. I.....	July 31	Oct. 1	139	Do.
Philadelphia, Pa.....	Oct. 2	Nov. 20	330	Ordered to Pensacola, Fla.
Key West, Fla.....	Nov. 24	Nov. 26	1,140	En route to Pensacola.
Pensacola, Fla.....	Nov. 28		485	Firing torpedoes in Pensacola Bay.
Pensacola, Fla.....	1910.	Apr. 15		Engaged in torpedo practice.
Charleston, S. C.....	Apr. 20	Apr. 21	1,044	En route to Newport.
Hampton Roads, Va.....	Apr. 24	Apr. 25	347	Do.
Newport, R. I.....	Apr. 27	May 16	392	Engaged in torpedo practice.
Tompkinsville, N. Y.....	May 17		154	Torpedo experimental work in Sandy Hook Bay.
Do.....		June 11	144	Do.
Hampton Roads, Va.....	June 13			Torpedo experimental work in Mobjack Bay.
Do.....		June 28	489	
Morris (torpedo boat).....				At the torpedo station, Newport, R. I.
Nanshan (collier).....				Collier service on the Asiatic station.
Narkeeta (tug).....				At the navy-yard, New York.
Narwhal (submarine), Lieut. JULIUS C. TOWNSEND, commanding. [Placed in commission Nov. 23, 1909, at the navy-yard, Boston, Mass.]				Attached to the Atlantic Torpedo Fleet.
Nashville (gunboat).....				Loaned to the Naval Militia, Illinois.
Navajo (tug).....				The Navajo was placed in commission at various times during the fiscal year for duty as tender to the Pacific Fleet during target practice. At the end of the fiscal year the Navajo is doing duty as yard craft at the navy-yard, Mare Island, Cal.
[Placed in commission Oct. 8, 1909, at the navy-yard, Puget Sound, Wash. Placed in full commission Oct. 28, 1909, at the navy-yard, Mare Island, Cal. Placed out of commission Jan. 3, 1910, at the navy-yard, Mare Island, Cal. Placed in commission Mar. 4, 1910, at the navy-yard, Mare Island, Cal. Placed out of commission May 28, 1910, at the navy-yard, Mare Island, Cal.]				

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Nebraska (battleship), Capt. JOHN T. NEWTON, commanding.	1909.	1909.	<i>Knots.</i>	
Navy-yard, New York.....	July 18	July 17	.....	Under repair.
Provincetown, Mass.....	.....	Aug. 4	367	Torpedo practice and maneuvers off Provincetown.
Hampton Roads, Va.....	Aug. 7	Aug. 11	639	Preparing for target practice.
Southern drill grounds.....	Aug. 11	Aug. 20	55	Record and battle target practice.
Hampton Roads, Va.....	Aug. 21	Aug. 23	55	Do.
Southern drill grounds.....	Aug. 23	Aug. 28	55	Do.
Hampton Roads, Va.....	Aug. 29	Aug. 30	55	Do.
Southern drill grounds.....	Aug. 30	Sept. 12	55	Do.
Hampton Roads, Va.....	Sept. 12	Sept. 20	55	Do.
New York City.....	Sept. 21	Oct. 6	279	For the Hudson-Fulton Celebration.
New York yard.....	Oct. 6	Nov. 30	5	Under repair.
Southern drill grounds.....	Dec. 1	Dec. 4	262	With Atlantic Fleet.
Hampton Roads, Va.....	Dec. 4	Dec. 6	30	Granting liberty.
Southern drill grounds.....	Dec. 6	Dec. 10	51	With Atlantic Fleet.
Hampton Roads, Va.....	Dec. 10	Dec. 14	50	Granting liberty.
New York yard.....	Dec. 15	.....	276	Under repair.
	1910.	1910.		
New York City.....	.....	Jan. 3	.....	Granting liberty.
Guantanamo Bay, Cuba.....	Jan. 12	Mar. 24	1,346	With Atlantic Fleet, engaged in drills and exercises.
Hampton Roads, Va.....	Mar. 28	Apr. 4	1,118	With Atlantic Fleet.
Southern drill grounds.....	Apr. 4	Apr. 11	30	Preparing for target practice.
Hampton Roads, Va.....	Apr. 11	Apr. 15	60	Bore sighting.
Southern drill grounds.....	Apr. 15	Apr. 28	60	With Atlantic Fleet engaged in target practice.
Hampton Roads, Va.....	Apr. 28	Apr. 29	64	Taking on stores.
Navy-yard, New York.....	Apr. 30	.....	.....	Under repair.
Neptune (collier).....	.....	.....	.....	Under construction at the works of the Maryland Steel Co., Sparrows Point, Md.
Nero (collier).....	.....	.....	.....	The Nero went ashore on Brentons Reef, near Newport, R. I., July 1, 1909, and remained aground until Aug. 2, 1909, when the vessel was floated and towed to Newport.
[Placed out of service Jan. 3, 1910, at the navy-yard, New York.]	.....	.....	.....
Newark (station ship), Lieut. MYLES JOYCE, commanding. Relieved by Lieut. Commander WALTER BALL, Nov. 26, 1909. Relieved by Capt. EDWARD E. WRIGHT, Jan. 31, 1910.	.....	.....	.....	At the naval station, Guantanamo Bay, Cuba.
New Hampshire (battle ship), Capt. CAMERON McR. WINSLOW, commanding. Relieved by Capt. THOMAS S. RODGERS, Nov. 4, 1909.	1909.	1909.	.....
Portsmouth, N. H.....	.....	July 6	.....	Under repair.
Provincetown, Mass.....	July 10	Aug. 4	323	Engaged in drills and exercises with Atlantic Fleet.
Hampton Roads, Va.....	Aug. 7	Aug. 10	649	Preparing for target practice.
Southern drill grounds.....	Aug. 10	Sept. 12	45	Target practice with Atlantic Fleet.
Hampton Roads, Va.....	Sept. 12	Sept. 20	50	Ordered to New York.
New York City.....	Sept. 22	Oct. 5	332	With Atlantic Fleet for the Hudson-Fulton celebration.
Bradford, R. I.....	Oct. 6	Oct. 8	174	To coal ship.
Portsmouth, N. H.....	Oct. 9	Dec. 15	256	For repairs.
Hampton Roads, Va.....	Dec. 18	Dec. 20	561	Rejoined Atlantic Fleet.
New York City.....	Dec. 22	.....	277	With Atlantic Fleet to give liberty.
	1910.	1910.		
New York City.....	.....	Jan. 7	.....	With Atlantic Fleet.
Guantanamo Bay, Cuba.....	Jan. 12	Mar. 24	1,375	With Atlantic Fleet engaged in drills and exercises.
Hampton Roads, Va.....	Mar. 28	Apr. 4	1,141	With Atlantic Fleet.
Southern drill grounds.....	Apr. 4	Apr. 28	42	With Atlantic Fleet engaged in target practice.
Hampton Roads, Va.....	Apr. 28	.....do.....	65	Transferring certain gun mechanism to the Norfolk yard.
Portsmouth, N. H.....	May 1	.....	574	Under repair.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
New Jersey (battle ship), Capt. DE WITT COFFMAN commanding. [Placed in "First Reserve" May 2, 1910, at the navy-yard, Boston, Mass.]	1909.	1909.	<i>Knots.</i>	
Southern drill grounds.....	Sept. 8	Sept. 8	.....	With fleet for record target practice.
Hampton Roads, Va.....	Sept. 10	Sept. 10	57	Coaling.
Southern drill grounds.....	Sept. 10	Sept. 12	60	With fleet for battle practice.
Hampton Roads, Va.....	Sept. 12	Sept. 20	67	With fleet for coaling, cleaning, and painting.
Ambrose Lightship, N. Y.....	Sept. 21	Sept. 22	295	With fleet en route to New York.
New York City.....	Sept. 22	Oct. 5	31	With fleet for Hudson-Fulton celebration.
Boston, Mass.....	Oct. 7	Nov. 30	404	For repairs.
Newport, R. I.....	Dec. 1	Dec. 1	275	For draft of men for ships of fleet.
Tompkinsville, N. Y.....	Dec. 2	Dec. 4	159	For ammunition.
Hampton Roads, Va.....	Dec. 5	Dec. 6	276	Rejoined fleet.
Southern drill grounds.....	Dec. 6	Dec. 10	29	With Atlantic Fleet.
Hampton Roads, Va.....	Dec. 10	Dec. 14	29	Do.
Southern drill grounds.....	Dec. 14	Dec. 16	30	Do.
Hampton Roads, Va.....	Dec. 16	Dec. 20	29	Do.
Ambrose Channel Lightship.....	Dec. 21	Dec. 22	263	En route to New York with fleet.
New York City.....	Dec. 22	.....	36	With Atlantic Fleet to spend holidays.
	1910.	1910.		
New York City.....	Jan. 7	Jan. 7	.....	With Atlantic Fleet.
Guantanamo Bay, Cuba.....	Jan. 12	Mar. 24	1,347	With Atlantic Fleet engaged in drills and exercises.
Hampton Roads, Va.....	Mar. 28	Apr. 4	1,110	With Atlantic Fleet.
Southern drill grounds.....	Apr. 5	Apr. 11	31	With Atlantic Fleet preparing for target practice.
Hampton Roads, Va.....	Apr. 11	Apr. 15	39	Bore sighting.
Southern drill grounds.....	Apr. 15	Apr. 28	32	With Atlantic Fleet engaged in target practice.
Hampton Roads, Va.....	Apr. 28	Apr. 29	41	Transferring men.
Boston, Mass.....	May 1	.....	347	For repairs and to go into reserve.
New Orleans (cruiser, third class), Commander ROGER WELLES commanding. [Placed in commission Nov. 15, 1909, at the navy-yard, Mare Island, Cal.]	1910.	1910.		
Mare Island, Cal.....	Jan. 8	Jan. 8	.....	Fitting out.
Do.....	Jan. 10	Mar. 16	125	Returned to the navy-yard, Mare Island, on account of leaky boilers. En route to the Asiatic Station.
Honolulu, Hawaii.....	Mar. 24	Apr. 5	2,100	Do.
Guam, Midway Islands.....	Apr. 18	Apr. 21	3,353	Do.
Yokohama, Japan.....	Apr. 25	May 1	1,388	Cruising on station.
Woocong, China.....	May 4	May 12	1,029	Do.
Hankow, China.....	May 16	May 27	567	Do.
Shanghai, China.....	May 29	May 31	580	Participated in memorial exercises.
Nanking, China.....	June 1	June 8	212	For opening of exposition.
Shanghai, China.....	June 9	June 26	212	Landed smallpox patient.
Nanking, China.....	June 28	.....	212	Awaiting orders.
Newport (gunboat).....	.....	.....	.....	New York Public Marine School.
New York (cruiser, first class), Commander SPENCER S. WOOD commanding. Relieved by Lieut. Commander WILLIAM D. BROTHERTON Mar. 5, 1910. Relieved by Commander JOSEPH L. JAYNE Mar. 16, 1910.	1909.	1909.		
Algiers, Algeria.....	Dec. 7	July 8	.....	For coal.
Naples, Italy.....	July 10	July 17	590	Joined Armored Cruiser Squadron.
Gibraltar.....	July 20	July 23	992	For coal.
Provincetown, Mass.....	Aug. 3	Aug. 3	3,236	Joined Atlantic Fleet.
Boston, Mass.....	do.	Aug. 8	50	For coal and stores.
Provincetown, Mass.....	Aug. 8	Aug. 22	50	Calibration and mining practice.
Hampton Roads, Va.....	Aug. 24	Aug. 26	553	For coal.
Southern drill grounds.....	Aug. 26	Aug. 28	52	Target practice.
Lynnhaven Roads.....	Aug. 28	Aug. 29	37	To calibrate.
Southern drill grounds.....	Aug. 29	Sept. 5	37	Target practice.
Hampton Roads, Va.....	Sept. 5	Sept. 8	55	To calibrate.
Target grounds.....	Sept. 8	Sept. 15	70	Record target practice.
Hampton Roads, Va.....	Sept. 15	Sept. 20	51	With Atlantic Fleet.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1909.	1909.	<i>Knots.</i>	
New York City.....	Sept. 22	Oct. 4	295	For the Hudson-Fulton celebration.
Boston, Mass.....	Oct. 5	Oct. 18	397	"Home," navy-yard.
Hampton Roads, Va.....	Oct. 18	Oct. 20	552	Ordered New Orleans.
New Orleans, La.....	Oct. 27	Nov. 2	1,510	For Deep Waterways Convention.
Boston, Mass.....	Nov. 8	Dec. 4	1,963	"Home," navy-yard.
Southern drill grounds.....	Dec. 6	Dec. 10	532	With Atlantic Fleet for maneuvers.
Hampton Roads, Va.....	Dec. 10	Dec. 16	140	To coal ship.
Philadelphia, Pa.....	Dec. 17		250	Placed in "First Reserve" Dec. 31, 1909.
	1910.	1910.		
Philadelphia, Pa.....		Apr. 10		Placed in full commission Apr. 1, 1910.
Hampton Roads, Va.....	Apr. 11	Apr. 19	243	To coal ship.
Cape Henry, Va.....	Apr. 19	Apr. 20	18	To clear channel of target raft.
Hampton Roads, Va.....	Apr. 20	Apr. 24	36	Do.
Gibraltar.....	May 5	May 11	3,338	En route to the Asiatic station.
Toulon, France.....	May 13	May 23	703	Do.
Spezia, Italy.....	May 24	May 31	194	Do.
Naples, Italy.....	June 1	June 9	299	Do.
Piræus, Greece.....	June 11	June 17	586	Do.
Alexandria, Egypt.....	June 19	June 25	514	Do.
Port Said, Egypt.....	June 26	June 26	168	Do.
Suez, Egypt.....	do	June 27	89	Do.
Nezinsoot (tug).....				The Nezinsoot was attached to the navy-yard, Portsmouth, N. H., until the vessel was capsized and sank off Rockport, Mass., on Aug. 11, 1909.
[Stricken from the navy list Aug. 25, 1909, as of date Aug. 11, 1909.]				
Nina (tug). Chief Boatswain JOHN S. CROGHAN commanding.				The Nina acted as a tender to submarines from the beginning of the fiscal year until lost. The vessel left the navy-yard, Norfolk, Va., at 6.30 a. m., Feb. 6, 1910, for Boston. She was sighted off the capes of the Chesapeake about noon of that day by the Merchant and Miners' steamship Howard. The weather at the time was blowing a gale, since which time the vessel has not been heard of.
[Stricken from the navy list and declared lost from Mar. 15, 1910, and the 1 officer and 30 enlisted men attached to the vessel are regarded as having died on that date.]				
Nipsic (prison ship).....				At the navy-yard, Puget Sound, Wash.
North Carolina (armored cruiser), Capt. WILLIAM A. MARSHALL commanding. Relieved by Lieut. Commander VICTOR BLUE Nov. 11, 1909. Relieved by Lieut. Commander HARLEY H. CHRISTY, Nov. 16, 1909. Relieved by Capt. CLIFFORD J. BOWSH Nov. 30, 1909.				
	1909.	1909.		
Mersina, Asia Minor.....	July 10	July 6		Protecting American interests.
Naples, Italy.....	July 10	July 17	1,200	New York joined armored Cruiser Squadron.
Gibraltar.....	July 20	July 23	996	Ordered home.
Boston, Mass.....	Aug. 3	Aug. 6	3,248	Ordered to join Atlantic Fleet.
Provincetown, Mass.....	Aug. 6	Aug. 22	48	Calibration practice.
Hampton Roads, Va.....	Aug. 24	Aug. 26	487	For ammunition.
Southern drill grounds.....	Aug. 26	Sept. 5	51	Target practice.
Hampton Roads, Va.....	Sept. 5	Sept. 9	54	For coal.
Southern drill grounds.....	Sept. 9	Sept. 17	54	Target practice.
Hampton Roads, Va.....	Sept. 17	Sept. 20	54	Ordered to New York City with Atlantic Fleet for the Hudson-Fulton celebration.
Off Ambrose Lightship.....	Sept. 21	Sept. 22	266	En route to New York City.
North River, New York City.....	Sept. 22	Oct. 4		For the Hudson-Fulton celebration.
Norfolk, Va.....	Oct. 5	Oct. 17	299	Under repair.
Hampton Roads, Va.....	Oct. 17	Oct. 20	9	Coaling.
Plot Town, La.....	Oct. 26	Oct. 27	1,442	En route to New Orleans.
New Orleans, La.....	Oct. 27	Nov. 2	91	For the Lakes to Gulf Deep Waterways convention.
Navy-yard, Norfolk, Va.....	Nov. 7		1,532	Under repair.
	1910.	1910.		
Navy-yard, Norfolk, Va.....		Feb. 19		Under repair.
Hampton Roads, Va.....	Feb. 19	Mar. 17	9	A waiting arrival of the Brazilian battle ship Minas Gernes.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Bridgetown, Barbados.....	1910. Mar. 22	1910. Mar. 27	<i>Knots.</i> 1,720	En route to Rio de Janeiro with remains of the late ambassador from Brazil, Señor Nabuco.
Rio de Janeiro, Brazil.....	Apr. 9	May 6	1,713	Do.
Montevideo, Uruguay.....	May 9	May 13	1,023	Joined Special Service Squadron.
Puerto Militar, Argentine.....	May 15	June 5	498	In connection with the Argentine centennial celebration.
Montevideo, Uruguay.....	June 7	June 14	496	With the Special Service Squadron.
Rio de Janeiro, Brazil.....	June 17	June 30	1,030	Do.
North Dakota (battle ship), Commander CHARLES P. PLUNKETT commanding. Relieved by Capt. RICHARD T. MULLIGAN May 19, 1910.				Fitting out at the Boston yard.
[Placed in commission Apr. 11, 1910, at the navy-yard, Boston, Mass.]				
Octopus (submarine), Lieut. DONALD C. BINGHAM commanding. Relieved by Lieut. FREDERICK V. McNAIR Jan. 14, 1900. Relieved by Lieut. SIMEON B. SMITH Apr. 4, 1910.				The Octopus was attached to the Atlantic Torpedo Fleet until the vessel was placed in reserve at Charleston. On Apr. 4, 1910, the vessel was assigned to duty at the torpedo station and at the end of the fiscal year was at that station.
Placed in reserve Feb. 14, 1910, at the navy-yard, Charleston, S. C. Placed in full commission Apr. 15, 1910, at the navy-yard, Charleston, S. C.]				
Ohio (battle ship), Capt. CLIFFORD J. BOUSH commanding. Relieved by Lieut. Commander ARTHUR MACARTHUR, Jr., Nov. 25, 1909.				
[Placed out of commission Dec. 20, 1909, at the navy-yard, New York.]				
Booth Bay, Me.....	1909. July 2	1909. July 6		To spend Fourth of July.
Provincetown, Mass.....	July 10	Aug. 4	167	With Atlantic Fleet.
Hampton Roads, Va.....	Aug. 7	Sept. 20	578	With Atlantic Fleet. Record and battle target practice on the Southern drill grounds.
New York City.....	Sept. 22		279	To participate in the Hudson-Fulton celebration with Atlantic Fleet.
Olympia (cruiser, second class), Commander CARLO B. BRITAIN commanding. Relieved by Commander JOHN HOOD Aug. 28, 1909. Relieved by Commander ARCHIBALD H. SCALES June 14, 1910.				
[Placed in reserve Aug. 28, 1909, at the Naval Academy, Annapolis, Md.]				
New London, Conn.....	1909. July	1909. July 6		With the Naval Academy Practice Squadron.
Gardiners Bay, N. Y.....	July 6	July 9		Do.
New London, Conn.....	July 9	July 12		Do.
Gardiners Bay, N. Y.....	July 12	July 16		Do.
New London, Conn.....	July 16	July 19		Do.
Gardiners Bay, N. Y.....	July 19	July 23		Do.
New London, Conn.....	July 23	July 26		Do.
Newport, R. I.....	July 26	July 29		Do.
Boston, Mass.....	July 30	Aug. 3		Do.
Gloucester, Mass.....	Aug. 3	Aug. 5		Do.
Portsmouth, N. H.....	Aug. 5	Aug. 7		Do.
Portland, Me.....	Aug. 7	Aug. 10		Do.
Bath, Me.....	Aug. 10	Aug. 15		Do.
Bar Harbor, Me.....	Aug. 16	Aug. 17		Do.
Newport, R. I.....	Aug. 19	Aug. 23		Do.
Solomons Island, Md.....	Aug. 25	Aug. 26		Do.
Annapolis, Md.....	Aug. 26			To be placed in reserve.
Omaha (wooden steam vessel).....				Loaned to the Marine-Hospital Service.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
			<i>Knots.</i>	
Onelda (tender).....				Loaned to the Naval Militia, District of Columbia.
Oregon (battle ship).....				At the navy-yard, Puget Sound, Wash.
Osceola (tug), Chief Boatswain GEORGE B. HENDRY, commanding.				At the naval station, Key West, Fla.
Ozark (monitor), Capt. HARRY M. DOMBAUGH, commanding. Relieved by Chief Gunner HUGH SENCLAIR, Apr. 27, 1910.				
[Assigned to duty with the District of Columbia Naval Militia Apr. 16, 1910.]				
Annapolis, Md.....	1910.	1910.		In reserve.
Norfolk, Va.....	Apr. 5	Apr. 4		Under repair.
Washington, D. C.....	June 26	June 25		Assigned to duty with the Naval Militia of the District of Columbia as relief of the Puritan.
Paducah (gunboat), Commander JOHN L. PURCELL, commanding. Relieved by Commander William W. Gilmer, Jan. 17, 1910.				
Puerto Cortez, Honduras.....	1909.	1909.		Protecting American interests.
Guantanamo Bay, Cuba.....	July 9	July 4		For coal and stores.
Puerto Cortez, Honduras.....	July 20	Aug. 21	867	Protecting American interests.
Guantanamo Bay, Cuba.....	Aug. 25	Oct. 2	836	Coal and stores. Target practice.
Target grounds, vicinity of Cuatro Reales Channel, Cuba.....	Oct. 3	Oct. 16	176	Target practice, great guns.
Guantanamo Bay, Cuba.....	Oct. 17	Oct. 19	170	For coal and stores.
Target grounds, vicinity of Cuatro Reales Channel, Cuba.....	Oct. 20	Nov. 1	162	Target practice, great guns.
Guantanamo Bay, Cuba.....	Nov. 2	Nov. 5	178	Coal and stores.
Portsmouth, N. H.....	Nov. 14		1,510	Under repair.
	1910.	1910.		
Portsmouth, N. H.....		Jan. 20		Under repair.
Newport, R. I.....	Jan. 21	Jan. 22	174	En route Tompkinsville.
Tompkinsville, N. Y.....	Jan. 25	Jan. 26	170	To take on board ammunition.
Key West, Fla.....	Feb. 1	Feb. 2	1,344	To coal ship.
New Orleans, La.....	Feb. 6	Feb. 14	527	For the Mardi Gras celebration.
Bluefields, Nicaragua.....	Feb. 20	Feb. 25	1,211	To protect American interests.
Bocas del Toro, Panama.....	Feb. 26	Mar. 16	181	To hold midshipman examination.
Bluefields, Nicaragua.....	Mar. 17	Mar. 22	205	To protect American interests.
Greytown, Nicaragua.....	Mar. 22	Mar. 23	64	Do.
Bluefields, Nicaragua.....	Mar. 23	Mar. 27	71	Do.
Greytown, Nicaragua.....	Mar. 28	Apr. 3	60	Do.
Bocas del Toro, Panama.....	Apr. 4	Apr. 5	115	For coal and stores.
Greytown, Nicaragua.....	Apr. 6	Apr. 10	152	To protect American interests.
Bluefields, Nicaragua.....	Apr. 10	Apr. 23	62	Do.
Little Corn Island, Nicaragua.....	Apr. 23	Apr. 26	33	Do.
Bluefields, Nicaragua.....	Apr. 26	May 1	39	Do.
Bocas del Toro, Panama.....	May 2	May 3	168	For coal and stores.
Cristobal, Isthmian Canal Zone.....	May 4	May 10	123	For stores.
Bluefields, Nicaragua.....	May 11	June 5	353	To protect American interests.
Cristobal, Isthmian Canal Zone.....	June 7	June 9	249	For coal and stores.
Bluefields, Nicaragua.....	June 10	June 18	275	To protect American interests.
Bocas del Toro, Panama.....	June 19	June 23	152	To make shipment north.
Port Limon, Costa Rica.....	June 23	June 24	72	To take on board an assistant surgeon for passage to Bluefields.
Bluefields, Nicaragua.....	June 25			To protect American interests.
Pampanga (gunboat).....				Loaned to the War Department for use at Corregidor, P. I.
Panay (gunboat).....				At the naval station, Olongapo, P. I.
Panther (repair ship), Commander CHARLES H. HARLOW, commanding. Relieved by Commander JOSIAH S. MCKEAN, May 18, 1910.				
	1909.	1909.		
Boston, Mass.....	July 9	July 9		Repair ship, Atlantic Fleet.
Provincetown, Mass.....	July 9	Aug. 5	49	Do.
Hampton Roads, Va.....	Aug. 6	Sept. 20	497	Do.
Tompkinsville, N. Y.....	Sept. 21	Oct. 1	270	Do.
Newburgh, N. Y.....	Oct. 1	do.	53	Do.
New York yard.....	do.	Dec. 1	54	Do.
Hampton Roads, Va.....	Dec. 1	Dec. 20	280	Do.
Tompkinsville, N. Y.....	Dec. 20	Dec. 22	273	Do.
North River, New York City.....	Dec. 22		6	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
New York City.....	Jan. 4	Jan. 4		Repair ship, Atlantic Fleet.
Tompkinsville, N. Y.....	Jan. 4	Jan. 8		Do.
Guantanamo Bay, Cuba.....	Jan. 13	Mar. 24	1,202	Do.
Hampton Roads, Va.....	Mar. 28	Apr. 29	1,064	Do.
Boston, Mass.....	May 1	.....	488	Under repair.
Paragua (gunboat), Ensign ARTHUR W. SEARS, commanding. Relieved by Ensign ROY L. LOWMAN, Aug. 13, 1909. Relieved by Lieut. Commander MATT H. SIGNOR, Mar. 27, 1910.				Cruising in the waters of the southern Philippines, suppressing piracy.
Patasco (tug), Chief Boatswain EDWARD J. NORCOTT, commanding. Relieved by Boatswain HAYDN WILLIAMS, June 2, 1910.				Tender to Atlantic Fleet.
Placed in commission July 28, 1909, at the navy-yard, Portsmouth, N. H.]				
Patterson (destroyer).....				Under construction at the works of William Cramp & Sons, Philadelphia, Pa.
Patuxent (tug), Lieut. OWEN HILL, commanding. Relieved by Chief Boatswain FREDERICK MULLER, Aug. 2, 1909.				Tender to Atlantic Fleet.
Paulding (destroyer).....				Under construction at the Bath Iron Works, Bath, Me.
Paul Jones (destroyer), Lieut. MILTON S. DAVIS, commanding. Relieved by Ensign RICHARD E. CASSTY, Dec. 15, 1909. Relieved by Ensign EARL R. SHIFF, Dec. 29, 1909. Relieved by Lieut. FRANK MCCOMMON, May 26, 1910.				Attached to the Pacific Torpedo Fleet.
Pawnee (tug).....				At the navy-yard, New York.
Pawtucket (tug).....				At the navy-yard, Puget Sound, Wash.
Penacook (tug).....				At the navy-yard, Portsmouth, N. H.
Pennsylvania (armored cruiser). Capt. FRANK A. WILNER, commanding. Relieved by Capt. CHARLES F. POND, July 4, 1909.				
	1909.	1909.		
Bremerton, Wash.....	Aug. 18	Aug. 18		Repairs and coal.
Seattle, Wash.....	Aug. 18	Aug. 28	18	Standardization trials.
Mare Island, Cal.....	Aug. 31	Sept. 3	825	Stores and coal.
San Francisco, Cal.....	Sept. 3	Sept. 5	30	With First Squadron of the Pacific Fleet.
Honolulu, Hawaii.....	Sept. 10	Sept. 20	2,140	Cruising with the armored cruisers of the Pacific Fleet.
Maalaea Bay, Hawaii.....	Sept. 20	Sept. 23	84	Full-power speed trial.
Molokai, Hawaii.....	Sept. 23	do.....	50	With First Squadron.
Lahaina, Hawaii.....	do.....	Sept. 24	38	En route to Honolulu.
Honolulu, Hawaii.....	Sept. 24	Oct. 5	73	To give liberty.
Nares Harbor, Admiralty Islands.	Oct. 17	Oct. 25	3,610	To coal ship.
Manila, P. I.....	Oct. 31	Nov. 4	1,850	To give liberty.
Cavite, P. I.....	Nov. 4	Nov. 7	4	To coal ship.
Olongapo, P. I.....	Nov. 7	Nov. 9	60	Preparing for target practice.
Manila, P. I.....	Nov. 9	Nov. 19	60	Night battle practice.
Olongapo, P. I.....	Nov. 20	Dec. 3	60	To dock ship.
Cavite, P. I.....	Dec. 3	Dec. 5	60	To coal ship.
Olongapo, P. I.....	Dec. 5	Dec. 6	60	Division firing.
Manila, P. I.....	Dec. 6	Dec. 10	60	To give liberty.
Hongkong, China.....	Dec. 12	Dec. 30	628	With West Virginia.
	1910.	1910.		
Nagasaki, Japan.....	Jan. 3	Jan. 13	1,065	Do.
Yokohama, Japan.....	Jan. 15	Jan. 20	744	With Pacific Fleet.
Honolulu, Hawaii.....	Jan. 31	Feb. 8	3,558	Do.
San Francisco, Cal.....	Feb. 14	Feb. 24	2,065	Do.
Mare Island Light, Cal.....	Feb. 24	Feb. 26	22	To coal ship.
San Francisco, Cal.....	Feb. 26	Mar. 1	22	To give liberty.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
Santa Barbara, Cal.....	Mar. 2	Mar. 7	299	Preparing for target practice.
Beechers Bay, Cal.....	Mar. 7	Mar. 11	34	Do.
Santa Barbara, Cal.....	Mar. 11	Mar. 15	53	Do.
Beechers Bay, Cal.....	Mar. 15	Mar. 17	35	Do.
San Francisco, Cal.....	Mar. 18	Mar. 18	288	For mail.
Mare Island Light, Cal.....	do.	Mar. 20	22	To coal ship.
San Francisco, Cal.....	Mar. 20	Mar. 22	22	Returning to Santa Barbara.
Santa Barbara, Cal.....	Mar. 23	Mar. 27	282	Preparing for target practice.
Santa Rosa Island, Cal.....	Mar. 27	Apr. 3	46	Holding elementary target practice.
Navy-yard, Puget Sound, Wash.....	Apr. 7	.....	.....	For repairs.
Pensacola (receiving ship), Commander EDWARD W. EBERLE, commanding. Relieved by Capt. JOHN B. MILTON, Jan. 19, 1910. Relieved by Lieut. Commander ALFRED A. PRATT, Feb. 5, 1910. Relieved by Commander GUY W. BROWN, Apr. 18, 1910.				At the naval training station, San Francisco, Cal.
Pentucket (tug).....				At the navy-yard, New York.
Peoria (gunboat), Chief Boatswain ERNEST V. SANDSTROM, commanding. Relieved by Chief Boatswain HAROLD S. OLSEN, July 31, 1909. Relieved by Boatswain WILLIAM DERRINGTON, Mar. 24, 1910.				Attached to the naval station, San Juan, P. R.
Perkins (destroyer).....				Under construction at the works of the Fore River Shipbuilding Co., Quincy, Mass.
Ferry (destroyer), Lieut. EDGAR B. LARIMER, commanding. Relieved by Lieut. FRANK MCCOMMON, Oct. 13, 1909. Relieved by Lieut. EARL R. SHIFF, May 26, 1910.				Attached to the Pacific Torpedo Fleet.
Petrel (gunboat), Lieut. Commander MONTGOMERY M. TAYLOR, commanding. [Placed in commission May 2, 1910, at the navy-yard, Mare Island, Cal.]				
	1910.	1910.		
Mare Island, Cal.....	June 5	June 5	.....	Fitting out.
San Pablo Bay, Cal.....	do.	do.	15	Swinging ship.
San Francisco, Cal.....	do.	June 10	12	Preparing for trip to the Atlantic coast.
Bremerton, Wash.....	June 14	June 17	820	Do.
Departure Bay, Vancouver Island.....	June 17	June 18	152	En route to Portsmouth, N. H., in company with the Wheeling.
Alert Bay, Cormorant Island.....	June 18	June 19	168	Do.
Dutch Harbor, Unalaska Island.....	June 26	.....	1,580	Do.
Philadelphia (receiving ship), Commander FRANCIS H. SHERMAN, commanding. Relieved by Lieut. GEORGE T. PETRENGILL, Sept. 20, 1909. Relieved by Commander LEVI C. BERTOLETTE, Jan. 3, 1910.				At the navy-yard, Puget Sound, Wash.
Pickrel (submarine).....				Under construction at the works of the Moran Company, Seattle, Wash.
Pike (submarine), Lieut. KIRBY B. CRITTENDEN, commanding.				Attached to the Pacific Torpedo Fleet.
Piscataqua (tug).....				At the naval station, Cavite, P. I.
Plunger (submarine), Ensign CHESTER W. NIMITZ, commanding. [Placed in reserve Nov. 6, 1909, at the navy-yard, Charleston, S. C.]				Attached to the Atlantic Submarine Fleet until placed in reserve at Charleston.
Pompey (collier).....				Collier service on the Asiatic station.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Pontiac (tug).....			<i>Knots.</i>	At the navy-yard, New York.
Porpoise (submarine), Lieut. GUY W. S. CASTLE, commanding. Relieved by Ensign KENNETH WHITING, July 8, 1909. Relieved by Ensign ERNEST D. McWHORTER, May 29, 1910.				Attached to the Asiatic Torpedo Fleet.
Porter (torpedo boat).....				In reserve at the navy-yard, Charleston, S. C.
Portsmouth (sailing vessel).....				Loaned to the Naval Militia, New Jersey.
Potomac (tug), Chief Boatswain ERNEST V. SANDSTROM, commanding.				During most of the fiscal year the Potomac has done duty as tender to the Atlantic Fleet. At the end of the fiscal year the vessel is repairing at the navy-yard, Boston, for duty at the naval station, Guantanamo, to which station the Potomac was assigned by department's order on May 20, 1910.
Powhatan (tug).....				At the navy-yard, New York.
Prairie (transport), Commander FRANK W. KELLOGG, commanding. Relieved by Commander EDWARD T. WITHERSPOON, May 19, 1910.				
	1909.	1909.		
Philadelphia, Pa.....	July 3	July 6		
Bradford, R. I.....	July 7	July 9	340	To coal ship.
Newport, R. I.....	July 9	July 15	6	Duty with naval militia.
New Haven, Conn.....	July 15	July 17	80	Do.
Newport, R. I.....	July 17	do	80	Do.
Provincetown, Mass.....	do	July 23	218	Do.
Boston, Mass.....	July 23	do	52	Do.
Provincetown, Mass.....	do	July 24	52	Do.
Newport, R. I.....	July 24	July 25	218	Do.
New Haven, Conn.....	July 25	July 26	80	Do.
Philadelphia, Pa.....	July 27	July 30	359	Do.
Provincetown, Mass.....	Aug. 1	Aug. 4	482	Do.
Boston, Mass.....	Aug. 4	do	52	Do.
Hampton Roads, Va.....	Aug. 6	Aug. 12	507	Do.
Philadelphia, Pa.....	Aug. 13	Aug. 18	239	To dock ship.
Newport, R. I.....	Aug. 19	Aug. 20	332	Transporting draft to Franklin.
Hampton Roads, Va.....	Aug. 21	Aug. 24	364	Do.
Southern drill grounds.....	Aug. 24	Aug. 28	52	Target practice.
Portsmouth, N. H.....	Aug. 30	Aug. 31	625	To transport draft from Maine to Philadelphia.
Philadelphia, Pa.....	Sept. 2	Sept. 3	585	To transport draft to Franklin.
Hampton Roads, Va.....	Sept. 4	Sept. 4	239	Ordered to the southern drill grounds.
Southern drill grounds.....	do	Sept. 7	52	Target practice.
Hampton Roads, Va.....	Sept. 7	Sept. 8	52	Do.
Southern drill grounds.....	Sept. 8	do	52	Mail trips.
Hampton Roads, Va.....	do	Sept. 9	52	Do.
Southern drill grounds.....	Sept. 9	do	52	Do.
Hampton Roads, Va.....	do	Sept. 10	52	Do.
Southern drill grounds.....	Sept. 10	Sept. 12	52	Do.
Hampton Roads, Va.....	Sept. 12	Sept. 20	52	Do.
Tompkinsville, N. Y.....	Sept. 21	Sept. 30	360	Ordered to New York.
North River, New York City.....	Sept. 30	do	12	For the Hudson-Fulton Celebration.
Spuyten Duyvil, N. Y.....	do	do	10	Do.
Tompkinsville, N. Y.....	do	Oct. 1		Ordered to Philadelphia.
Philadelphia, Pa.....	Oct. 2	Dec. 2	220	
Pea Patch Shoal, Delaware River.....	Dec. 2	Dec. 11	25	A ground. Marine expeditionary force for Nicaragua on board.
Philadelphia, Pa.....	Dec. 11	Dec. 16	25	For examination of ship.
Cristobal, Isthmian Canal Zone.....	Dec. 22	Dec. 26	1,827	Marine expeditionary force on board bound for Nicaragua.
Bluefields, Nicaragua.....	Dec. 27		270	With stores and supplies for Des Moines, Tacoma, Eagle, and Nicaraguan refugees.
	1910.	1910.		
Bluefields, Nicaragua.....		Jan. 8		Transport duty in connection with the Nicaraguan Expeditionary Squadron.
Cristobal, Isthmian Canal Zone.....	Jan. 9	Jan. 13	283	Do.
Bluefields, Nicaragua.....	Jan. 14	Jan. 26	274	Do.
Cristobal, Isthmian Canal Zone.....	Jan. 27	Feb. 5	283	Do.
Bluefields, Nicaragua.....	Feb. 6	Mar. 17	274	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Cristobal, Isthmian Canal Zone....	1910. Mar. 18	1910. Mar. 23	<i>Knots.</i> 283	Transport duty in connection with the Nicaraguan Expeditionary Squadron.
Philadelphia, Pa.....	Mar. 30	Apr. 7	1,957	Do.
Cristobal, Isthmian Canal Zone....	Apr. 13	Apr. 15	1,957	With marines.
Port Royal, S. C.....	Apr. 20	Apr. 21	1,583	Do.
Philadelphia, Pa.....	Apr. 23	Apr. 27	654	Making passage.
Charleston, S. C.....	Apr. 29	Apr. 29	481	Convoying and towing submarines Tarantula and Viper.
Anchorage off Cape Henry.....	May 2	May 3	378	Do.
Philadelphia, Pa.....	May 4	May 29	183	Making passage.
Cristobal, Isthmian Canal Zone....	June 4	June 8	1,948	Do.
Off Bluefields, Nicaragua.....	June 9	June 12	282	With marines.
Cristobal, Isthmian Canal Zone....	June 13	June 16	271	Do.
Off Bluefields, Nicaragua.....	June 17	.....	282	Making passage.
Freble (destroyer), Lieut. CHARLES E. BELLHART, commanding. Relieved by Ensign CHARLES A. WOODRUFF, Dec. 15, 1909. Relieved by Lieut. ERNEST A. SWANSON, Dec. 31, 1909.	.....	.....	.....	Attached to the Pacific Torpedo Fleet.
[Placed in full commission Sept. 17, 1909, at the navy-yard, Mare Island, Cal.]	.....	.....	.....	.....
Preston (destroyer), Lieut. Commander DAVID F. BOYD, commanding.	.....	.....	.....	Attached to the Atlantic Torpedo Fleet.
[Placed in commission Dec. 24, 1909, at the navy-yard, Philadelphia, Pa.]	.....	.....	.....	.....
Princeton (gunboat), Commander CHARLES H. HAYES, commanding.	.....	.....	.....	.....
[Placed in commission Nov. 5, 1909, at the navy-yard, Puget Sound, Wash.]	.....	.....	.....	.....
Bremerton, Wash.....	1909. Nov. 29	1909. Nov. 28	.....	Fitting out.
Willapa Bay, Wash.....	Nov. 29	Dec. 1	260	Touched bottom on Willapa Bar.
California City, Cal.....	Dec. 4	Dec. 5	590	For coal and provisions.
Acapulco, Mexico.....	Dec. 14	Dec. 15	1,968	En route to Central America.
Corinto, Nicaragua.....	Dec. 20	Dec. 23	824	Assigned to duty with the Nicaraguan Expeditionary Squadron.
San Juan del Sur, Nicaragua.....	Dec. 24	Dec. 26	123	Under orders of commander Nicaraguan Expeditionary Squadron.
Corinto, Nicaragua.....	1910. Jan. 6	1910. Jan. 6	.....	Protecting American interests.
Tamarinda River, Nicaragua.....	Jan. 6	Jan. 8	30	With Nicaraguan expeditionary squadron.
Corinto, Nicaragua.....	Jan. 8	Jan. 10	30	Do.
Paseo Cabello Inlet, Nicaragua.....	Jan. 10	Jan. 11	7	Do.
Corinto, Nicaragua.....	Jan. 11	Jan. 30	7	Do.
Potosi, Nicaragua.....	Jan. 30	Feb. 3	70	Do.
Amapala, Honduras.....	Feb. 3	.....do.....	22	Do.
La Union, Salvador.....	Feb. 4	Feb. 4	20	Do.
Corinto, Nicaragua.....	Feb. 5	Apr. 13	77	Do.
La Union, Salvador.....	Apr. 14	Apr. 19	67	Protecting American interests on the west coast of Central America.
Corinto, Nicaragua.....	Apr. 20	May 31	64	Do.
Acapulco, Mexico.....	June 4	June 4	750	En route Puget Sound.
Navy-yard, Puget Sound, Wash.....	June 19	.....	2,622	For repairs.
Prometheus (collier).....	.....	.....	.....	Collier service on the Pacific coast.
[Placed in service Jan. 15, 1910, at the navy-yard, Mare Island, Cal.]	.....	.....	.....	.....
Puritan (monitor).....	.....	.....	.....	The Puritan was assigned to duty with the District of Columbia Naval Militia from the beginning of the fiscal year until June 29, 1910, when the vessel was detached from that duty, being replaced by the Ozark, and proceeded to the navy-yard, Norfolk, Va., for repairs.
Quiros (gunboat).....	.....	.....	.....	At the naval station, Cavite, P. I.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Rainbow (transport), Commander JOHN A. DOUGHERTY, commanding. Relieved by Ensign NELSON H. GOSS, Aug. 1, 1909. Relieved by Commander GEORGE R. SLOCUM, Mar. 14, 1910. Relieved by Ensign ARTHUR C. STOTT, Jr., Apr. 18, 1910.				
	1909.	1909.	<i>Knots.</i>	
Woosung, China.....	July 1	July 1	.....	Tender to First Torpedo Flotilla.
Shanghai, China.....	July 1	July 5	16	Do.
Woosung, China.....	July 5	July 8	16	Do.
Nanking, China.....	July 10	July 12	197	Do.
Woosung, China.....	July 13	July 14	197	Do.
Shanghai, China.....	July 14	July 22	16	Do.
Woosung, China.....	July 22	July 23	16	Do.
Shanghai, China.....	July 23	Aug. 5	16	Do.
Hongkong, China.....	Aug. 9	Aug. 24	820	Do.
Cavite, P. I.....	Aug. 27	Sept. 19	63	Do.
Olongapo, P. I.....	Sept. 19	Sept. 25	63	Do.
Cavite, P. I.....	Sept. 25	Sept. 25	63	Do.
	1910.	1910.		
Cavite, P. I.....		Apr. 19		Acting as tender to the Asiatic Torpedo Fleet.
Olongapo, P. I.....	Apr. 19	May 5	60	To dock ship.
Cavite, P. I.....	May 5		60	Acting as tender to the Asiatic Torpedo Fleet.
Raleigh (cruiser, third class).....				At the navy-yard, Mare Island, Cal.
Ranger (gunboat).....				Public Marine School, Boston.
Rapido (tug).....				At the naval station, Cavite, P. I.
Reid (destroyer), Lieut. Commander JOHN S. DODDRIDGE, commanding.				Attached to the Atlantic Torpedo Fleet.
[Placed in commission Dec. 3, 1909, at the navy-yard, Boston, Mass.]				
Reina Mercedes (auxiliary).....				Auxiliary to the Constellation at the training station, Newport, R. I.
Relief (hospital ship), Surg. ARTHUR W. DUNBAR, in command of. Relieved by Surg. ROBERT E. LEDBETTER, Feb. 18, 1910.				At the naval station, Olongapo, P. I.
[Placed out of service and assumed status of a floating station hospital at the naval station, Olongapo, P. I., June 10, 1910.]				
Restless (tender).....				At the torpedo station, Newport, R. I.
Rhode Island (battle ship), Capt THOMAS D. GRIFFIN, commanding.				
	1909.	1909.		
Navy-yard, New York.....		July 8		Under repair.
Provincetown, Mass.....	July 10	Aug. 4	437	Target practice with Atlantic Fleet.
Hampton Roads, Va.....	Aug. 7	Aug. 10	660	In connection with the target practice on the southern drill grounds.
Southern drill grounds.....	Aug. 10	Aug. 20	80	Do.
Hampton Roads, Va.....	Aug. 20	Aug. 21	45	Do.
Southern drill grounds.....	Aug. 21	Aug. 27	80	Do.
Hampton Roads, Va.....	Aug. 27	Aug. 29	45	Do.
Southern drill grounds.....	Aug. 29	Sept. 12	80	Do.
Hampton Roads, Va.....	Sept. 12	Sept. 20	45	Do.
Off Ambrose Channel.....	Sept. 21	Sept. 22	272	En route to New York City.
North River, New York City.....	Sept. 22	Oct. 5	32	With the Atlantic Fleet for the Hudson-Fulton celebration.
Tompkinsville, N. Y.....	Oct. 5	Oct. 7	20	With Atlantic Fleet.
Navy-yard, New York.....	Oct. 7	Nov. 29	7	Under repair.
Southern drill grounds.....	Dec. 1	Dec. 4	272	With Atlantic Fleet.
Fort Monroe, Va.....	Dec. 4	Dec. 6	69	Do.
Southern drill grounds.....	Dec. 6	Dec. 10	33	Do.
Fort Monroe, Va.....	Dec. 10	Dec. 14	73	Do.
Southern drill grounds.....	Dec. 14	Dec. 16	33	Do.
Fort Monroe, Va.....	Dec. 16	Dec. 20	33	Do.
New York City.....	Dec. 22		288	With Atlantic Fleet to give liberty and spend Christmas holidays.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
New York City.....		Jan. 7		With Atlantic Fleet.
Guantanamo Bay, Cuba.....	Jan. 12	Mar. 24	1,412	With Atlantic Fleet engaged in drills and exercises.
Hampton Roads, Va.....	Mar. 28	Apr. 4	1,163	With Atlantic Fleet.
Southern drill grounds.....	Apr. 4	Apr. 11	30	Preparing for target practice.
Hampton Roads, Va.....	Apr. 11	Apr. 15	39	Bore sighting.
Southern drill grounds.....	Apr. 15	Apr. 28	59	With Atlantic Fleet engaged in holding elementary target practice.
Navy-yard, New York.....	Apr. 29		256	Under repair.
Richmond (auxiliary).....				Auxiliary to the receiving ship Franklin at the navy-yard, Norfolk, Va.
Rocket (tug).....				At the navy-yard, Norfolk, Va.
Rodgers (torpedo boat)				The Rodgers was in reserve and attached to duty with the reserve torpedo divisions, Charleston, until June 10, when the vessel left Charleston for Boston for duty with the Massachusetts Naval Militia.
[Assigned to duty with the Massachusetts Naval Militia May 14, 1910.]				
Roe (destroyer).....				Under construction at the works of the Newport News Shipbuilding Co., Newport News, Va.
Rowan (torpedo boat), Ensign EARL R. SHIPP, commanding. Relieved by Ensign SYLVESTER H. LAWTON, Jr., Dec. 31, 1909.				Attached to the Pacific Torpedo Fleet.
[Placed in full commission Dec. 21, 1909, at the navy-yard, Mare Island, Cal.]				
Salem (scout cruiser), Commander ALBERT L. KEY, commanding. Relieved by Commander GEORGE R. EVANS, Nov. 12, 1909.				
	1909.	1909.		
Boston, Mass.....	July 1	July 21		Installing water consumption tanks.
Rockport, Mass.....	July 21	July 24	34	Ordered to Salem.
Salem, Mass.....	July 24	Aug. 1	19	"Old home week." Received certain gifts presented by city.
Gloucester, Mass.....	Aug. 1	Aug. 7	9	"Old home week."
Rockport, Mass.....	Aug. 7	Aug. 8	53	Water consumption tests.
East Lamoine, Me.....	Aug. 8	Aug. 9	165	Coaled ship. Water-consumption tests.
Rockland, Me.....	Aug. 9	Aug. 12	110	Standardization trials.
East Lamoine, Me.....	Aug. 12	Aug. 13	345	Coaled ship. Water-consumption tests.
Bar Harbor, Me.....	Aug. 13	Aug. 14	200	Water-consumption tests.
Boston, Mass.....	Aug. 15	Sept. 1	269	Installing new wireless plant.
Provincetown, Mass.....	Sept. 1	Sept. 5	45	Calibrating guns.
Hampton Roads, Va.....	Sept. 6	Sept. 9	490	Coaled ship. Preparing for target practice.
Southern drill grounds.....	Sept. 9	Sept. 15	61	Autumn target practice.
Hampton Roads, Va.....	Sept. 15	Sept. 20	61	Preparing for the Hudson-Fulton celebration.
Off Ambrose Lightship.....	Sept. 21	Sept. 22	260	En route New York City.
North River, New York City.....	Sept. 22	Oct. 1	36	For the Hudson-Fulton celebration.
Newburgh, N. Y.....	Oct. 2	Oct. 3	35	Do.
Poughkeepsie, N. Y.....	Oct. 3	Oct. 5	35	Do.
Boston, Mass.....	Oct. 6	Dec. 5	320	Preparing for wireless tests.
Tompkinsville, N. Y.....	Dec. 6	Dec. 6	333	Carrying out wireless tests with the Brant Rock Station.
Provincetown, Mass.....	Dec. 7	Dec. 14	210	Do.
Hampton Roads, Va.....	Dec. 21		1,386	Do.
	1910.	1910.		
Hampton Roads, Va.....		Jan. 18		Awaiting orders.
Norfolk, Va.....	Jan. 18	Feb. 12	11	Under repair.
Do.....	Feb. 18	Mar. 28	1,486	Searching for the Nina, and under repair.
Hampton Roads, Va.....	Mar. 28	Mar. 31	9	With Atlantic Fleet.
Southern drill grounds.....	Mar. 31	Apr. 2	42	Engaged in backing tests.
Hampton Roads, Va.....	Apr. 2	Apr. 8	99	
Boston, Mass.....	Apr. 10	Apr. 29	406	
Lynnhaven Roads, Va.....	May 1	May 5	493	Elementary target practice.
Southern drill grounds.....	May 5	May 7	41	
Hampton Roads, Va.....	May 7	May 12	21	
Tompkinsville, N. Y.....	May 13	May 17	252	

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
Gardiners Bay, N. Y.	May 18	May 25	152	Exercises—compasses and torpedoes.
Eighty-ninth street, North River, New York City.	May 26	May 30	156	Special duty—Decoration Day.
One hundred and twenty-fourth street, North River, New York City.	May 30	June 13	2	Do.
Boston, Mass.	June 14	June 24	393	Special duty—Bunker Hill Day.
Bar Harbor, Me.	June 23	June 27	175	
East Lamolne, Me.	June 27	June 30	6	To coal ship.
Bar Harbor, Me.	do.	June 30	6	
Herring Bay, Canada.	June 30		67	
Salmon (submarine)				Under construction at the works of the Fore River Shipbuilding Co., Quincy, Mass.
Samar (gunboat), Ensign THOMAS WITHERS, Jr., commanding. Relieved by Ensign WILLIAM C. I. STILES, Dec. 19, 1909. Relieved by Ensign NELSON H. GOSS, May 11, 1910.				
	1909.	1909.		
Hongkong, China.	July 2	July 2		Chinese river service.
Canton, China.	July 2	July 9	83	Do.
Hongkong, China.	July 9	July 24	83	Do.
Kun Yik, China.	July 24	July 25	91	Do.
Ngae Mun, China.	July 25	July 26	24	Do.
Sam Sul, China.	July 26	July 27	78	Do.
How Lik, China.	July 27	do.	17	Do.
Sai Nam, China.	do.	July 28	19	Do.
Canton, China.	July 28	Aug. 7	77	Do.
Hongkong, China.	Aug. 7	Sept. 4	83	Do.
Sam Sul, China.	Sept. 5	Sept. 6	133	Do.
Sha Po, China.	Sept. 6	Sept. 7	14	Do.
Sam Sul, China.	Sept. 7	Sept. 10	39	Do.
Yet Shing, China.	Sept. 10	Sept. 12	57	Do.
Hongkong, China.	Sept. 13	Sept. 23	190	Do.
Bias Bay, China.	Sept. 23	Sept. 24	53	Do.
Hongkong, China.	Sept. 24	Oct. 6	42	Do.
Ngae Mun, China.	Oct. 6	Oct. 7	96	Do.
Sun Cheong, China.	Oct. 7	do.	40	Do.
Kun Yik, China.	do.	Oct. 8	24	Do.
Kong Mun, China.	Oct. 8	Oct. 12	33	Do.
Hongkong, China.	Oct. 12	Oct. 16	95	Do.
Canton, China.	Oct. 16	Oct. 18	83	Do.
Wu Chau, China.	Oct. 20	Oct. 22	223	Do.
Sam Sue, China.	Oct. 22	Oct. 25	120	Do.
Hongkong, China.	Oct. 25	Nov. 2	123	Do.
Kong Mun, China.	Nov. 2	Nov. 5	96	Do.
Sam Shin, China.	Nov. 5	Nov. 7	28	Do.
Canton, China.	Nov. 7	Nov. 9	92	Do.
Hongkong, China.	Nov. 9	Nov. 16	83	Do.
Swatow, China.	Nov. 17	Nov. 19	180	Company with U. S. S. Helena.
Amoy, China.	Nov. 20	Nov. 23	132	Do.
Tung Yung, China.	Nov. 24	Nov. 26	192	Do.
Shanghai, China.	Nov. 28	Dec. 1	378	Do.
Tu Point Island.	Dec. 1	Dec. 2	92	To Nimrod Sound for battle practice.
Nimrod Sound, China.	Dec. 2	Dec. 6	60	Target practice.
Ning Po, China.	Dec. 6	Dec. 7	80	By order of senior officer present.
Nimrod Sound, China.	Dec. 7	Dec. 20	80	In company U. S. S. Helena.
Shanghai, China.	Dec. 21	Dec. 27	152	By order commander in chief.
Wusung, China.	Dec. 27		13	Do.
	1910.	1910.		
Woosung, China.	Jan. 3	Jan. 3		Chinese river service
Shanghai, China.	Jan. 3	Jan. 9	14	Do.
Woosung, China.	Jan. 9	Jan. 13	14	Do.
Shanghai, China.	Jan. 13	Mar. 14	14	Do.
Chinkiang, China.	Mar. 15	Mar. 16	164	Do.
Nanking, China.	Mar. 16	Mar. 25	47	Do.
Wuhu, China.	Mar. 25	Mar. 27	52	Do.
Nanking, China.	Mar. 27	Mar. 31	52	Do.
Shanghai, China.	Apr. 2	Apr. 10		Do.
Woosung, China.	Apr. 10	Apr. 11	14	Do.
Huifu Bay, China.	Apr. 14	Apr. 24	520	For elementary target practice.
Amoy, China.	Apr. 25	Apr. 26	30	Put in during heavy weather.
Huifu Bay, China.	Apr. 27	Apr. 28	30	For elementary target practice.
Off Bonham Strait, China.	Apr. 30	May 2	450	Fog bound.
Woosung, China.	May 2	May 12	70	Chinese river service.
Hankow, China.	May 16	June 10	585	Do.
Changsha, China.	June 13		218	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
			<i>Knots.</i>	
Samoset (tug).....				At the navy-yard, Philadelphia, Pa.
Sandoval (gunboat).....				Loaned to the naval militia, New York.
San Francisco (cruiser, second class)				At the navy-yard, Norfolk, Va.
Saturn (collier).....				Collier service on the Pacific coast.
Scorpion (converted yacht), Commander GEORGE W. LOGAN, commanding. Relieved by Lieut. ALLEN BUCHANAN, July 13, 1909.				
	1909.	1909.		
Naples, Italy.....		July 15		Under repair.
Constantinople, Turkey.....	July 20	Oct. 9	920	Station ship.
Therapia, Turkey.....	Oct. 9	do.		Cruising.
San Stefano, Turkey.....	do.	Oct. 11	18	Do.
Halki, Asia Minor.....	Oct. 11	Oct. 12	16	Do.
Paulo Lima, Asia Minor.....	Oct. 12	Oct. 13	12	Do.
Constantinople, Turkey.....	Oct. 13	Nov. 11	25	Station ship.
Dis Burum, Asia Minor.....	Nov. 11	Nov. 12	34	Cruising.
Ismid, Asia Minor.....	Nov. 12	Nov. 13	18	Do.
Paulo Lima, Asia Minor.....	Nov. 13	Nov. 14	36	Do.
Constantinople, Turkey.....	Nov. 14		12	Station ship.
	1910.	1910.		
Constantinople, Turkey.....		Jan. 6		Station ship.
Szmid, Turkey.....	Jan. 6	Jan. 8	51	To exercise crew at small arms.
Constantinople, Turkey.....	Jan. 8	Jan. 15	51	Station ship.
Do.....	Jan. 15	Feb. 20	30	With ambassador on board.
Szmid, Turkey.....	Feb. 20	Feb. 25	51	Painted ship.
Constantinople, Turkey.....	Feb. 25	Mar. 7	67	Station ship.
Gulf of Kassandra.....	Mar. 8	Mar. 9	270	En route to Salonica with ambassador.
Salonica, Turkey.....	Mar. 9	Mar. 11	82	With ambassador on board.
Piræus, Greece.....	Mar. 13	Mar. 17	290	Do.
Alexandria, Egypt.....	Mar. 19	Mar. 30	515	Do.
Constantinople, Turkey.....	Apr. 1	May 7	745	Station ship.
Moudnia, Turkey.....	May 7	May 9	42	Exercising ship and crew.
Constantinople, Turkey.....	May 9	June 1	42	Station ship.
Frinkipo, Turkey.....	June 1	June 8	11	To paint ship.
Constantinople, Turkey.....	June 8	June 9	11	Station ship.
Phalærum Bay, Greece.....	June 10	June 17	357	To meet U. S. S. New York.
Constantinople, Turkey.....	June 18	June 20	357	Station ship.
Therapia, Turkey.....	June 20	June 28	9	Exercising ship and crew.
Constantinople, Turkey.....	June 28		9	Station ship.
Sehago (tug).....				At the navy-yard, Charleston, S. C.
Severa (station ship and tender), Commander JOHN HOOD, commanding while at the Naval Academy.				
[The Severa was relieved as station ship at the Naval Academy by the Hartford on Feb. 15, 1910, and assigned to duty as tender to the Third Submarine Division, Atlantic Torpedo Fleet, the same date.]				
	1910.	1910.		
Annapolis, Md.....		Apr. 10		At the Naval Academy.
Norfolk, Va.....	Apr. 11	May 14		Under repair.
Boston, Mass.....	May 17	June 29		Tender to submarines. Auxiliary to the Castine.
Provincetown, Mass.....	June 29			Do.
Shark (submarine), Lieut. GUY W. S. CASTLE, commanding. Relieved by Ensign THEODORE G. ELLYSON, July 8, 1909. Relieved by Ensign HENRY M. JENSEN, Feb. 2, 1910.				Attached to the Atlantic Torpedo Fleet.
Shubrick (torpedo boat), Ensign GEORGE B. WRIGHT, commanding.				In reserve at the navy-yard, Charleston, S. C.
[Placed in reserve Nov. 30, 1909, at the navy-yard, Charleston, S. C.]				

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
			<i>Knots.</i>	
Sloux (tug).....				At the navy-yard, Boston.
Siren (tender).....				At the navy-yard, Norfolk, Va.
Skate (submarine).....				Under construction at the works of the Moran Co., Seattle, Wash.
Skijack (submarine).....				Under construction at the works of the Fore River Shipbuilding Co., Quincy, Mass.
Smith (destroyer), Lieut. Commander GEORGE C. DAY, commanding. [Placed in commission Nov. 26, 1909, at the navy-yard, Philadelphia, Pa.]				Attached to the Atlantic Torpedo Fleet.
Snapper (submarine), Lieut. CHESTER W. NIMITZ, commanding. [Placed in commission Feb. 2, 1910, at the navy-yard, Boston, Mass.]				Attached to the Atlantic Torpedo Fleet.
Solace (hospital ship), Surg. GEORGE PICKRELL, in command of. [Placed in service Nov. 20, 1909, at the navy-yard, Charleston, S. C.]	1909.	1909.		
Charleston, S. C.....	Dec. 6	Dec. 5		Fitting out.
Hampton Roads, Va.....		Dec. 20	423	Joined Atlantic Fleet for duty as hospital ship.
New York, N. Y.....	Dec. 21		265	With Atlantic Fleet.
	1910.	1910.		
New York City.....		Jan. 30		Hospital ship for the Atlantic Fleet.
Guantanamo Bay, Cuba.....	Feb. 3	Mar. 24	1,340	Do.
Hampton Roads, Va.....	Mar. 28	Apr. 5	1,092	Do.
Southern drill grounds.....	Apr. 5	Apr. 9	33	Do.
Hampton Roads, Va.....	Apr. 9	Apr. 16	33	Do.
Southern drill grounds.....	Apr. 16	Apr. 27	33	Do.
Hospital Point, Va.....	Apr. 27	Apr. 28	69	Do.
Charleston, S. C.....	Apr. 30		408	Under repair.
Somers (torpedo boat).....				Landed to the Naval Militia, Maryland.
Sotoyomo (tug).....				At the navy-yard, Puget Sound, Wash.
South Carolina (battle ship), Capt. AUGUSTUS F. FECHTELER, commanding. [Placed in commission Mar. 1, 1910, at the navy-yard, Philadelphia, Pa.]	1910.	1910.		
Philadelphia, Pa.....		Mar. 6		Fitting out.
Hampton Roads, Va.....	Mar. 8	Mar. 10	270	"Shaking down" cruise.
Culebra, West Indies.....	Mar. 15	Mar. 26	1,285	Do.
St. Croix, Danish West Indies.....	Mar. 26	Mar. 28	51	Do.
St. Thomas, Danish West Indies.....	Mar. 28	Mar. 29	38	Do.
Habana, Cuba.....	Apr. 2	Apr. 7	1,039	Do.
Charleston, S. C.....	Apr. 10	Apr. 15	648	To receive silver service.
Hampton Roads, Va.....	Apr. 17	Apr. 19	431	To coal ship.
Provincetown, Mass.....	Apr. 21	May 3	538	Preparing for final trial.
Hampton Roads, Va.....	May 5	May 9	606	Held final trial.
Lynnhaven Bay, Va.....	May 9	May 22	447	Preparing for target practice.
Southern drill grounds.....	May 22	May 27	319	Held target practice.
Norfolk, Va.....	May 27	June 16	36	Under repair.
New York City.....	June 17	June 18	338	To take part in the reception to ex-President Roosevelt.
Norfolk, Va.....	June 19		283	Under repair.
South Dakota (armored cruiser), Capt. JAMES T. SMITH, commanding.	1909.	1909.		
Mare Island, Cal.....		Aug. 11		Under repair.
Hunters Point, Cal.....	Aug. 11	Aug. 14	27	To dock ship.
California City, Cal.....	Aug. 14	Aug. 15	11	To coal ship.
Seattle, Wash.....	Aug. 18	Aug. 28	857	Duty in connection with exposition.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1909.	1909.	<i>Knots.</i>	
California City, Cal.....	Aug. 31	Sept. 2	857	To coal ship.
San Francisco, Cal.....	Sept. 2	Sept. 5	7	Rejoined flag.
Honolulu, Hawaii.....	Sept. 10	Sept. 20	2,086	Cruising with the armored cruisers of the Pacific Fleet.
Maui Bay, Hawaii.....	Sept. 20	Sept. 22	88	Full-speed trials.
Do.....	Sept. 22	do.....	100	Do.
Hilo, Hawaii.....	Sept. 23	Sept. 24	116	Cruising in squadron.
Honolulu, Hawaii.....	Sept. 25	Oct. 5	216	
Nares Harbor, Admiralty Islands..	Oct. 17	Oct. 25	3,687	Cruising with the armored cruisers of the Pacific Fleet.
Manila, P. I.....	Oct. 30	Nov. 7	1,948	Do.
Olongapo, P. I.....	Nov. 7	Nov. 12	60	Cruising.
Manila, P. I.....	Nov. 12	Nov. 19	60	Do.
Olongapo, P. I.....	Nov. 20	Dec. 3	60	Target practice.
Manila, P. I.....	Dec. 4	Dec. 5	60	Do.
Olongapo, P. I.....	Dec. 5	Dec. 6	60	To dock ship.
Manila, P. I.....	Dec. 6	Dec. 10	60	With Pacific Fleet.
Yokohama, Japan.....	Dec. 15	Dec. 30	1,722	Cruising in company with the California.
	1910.			
Wooesung, China.....	Jan. 14	Jan. 14		With California, Colorado, and Maryland.
Yokohama, Japan.....	Jan. 17	Jan. 20	1,010	With Pacific Fleet.
Honolulu, Hawaii.....	Jan. 31	Feb. 8	3,399	Do.
San Francisco, Cal.....	Feb. 14	Feb. 24	2,160	Do.
Mare Island Light, Cal.....	Feb. 24	Feb. 26	28	To coal ship.
San Francisco, Cal.....	Feb. 26	Mar. 1	28	To join flagship.
Santa Barbara, Cal.....	Mar. 2	Mar. 7	280	Cruising with California, Colorado, West Virginia, Pennsylvania, and Maryland.
San Francisco, Cal.....	Mar. 8	Mar. 9	250	En route to Mare Island.
Mare Island, Cal.....	Mar. 9	Mar. 19	28	Under repair preparing for trip to Buenos Aires.
Mare Island Light, Cal.....	Mar. 19	Mar. 20	4	For coal and necessary stores prior to departure.
San Francisco, Cal.....	Mar. 20	Mar. 21	28	Awaiting arrival of the Tennessee off the Farallones.
Panama, Panama.....	Apr. 2	Apr. 12	3,344	In company with Tennessee to join the Special Service Squadron.
Punta Arenas, Chile.....	Apr. 26	May 1	3,994	Do.
Maldonado, Uruguay.....	May 5	May 9	1,287	Joined the Special Service Squadron.
Montevideo, Uruguay.....	May 9	May 13	63	With the Special Service Squadron.
Puerto Militar, Argentina.....	May 15	June 5	469	With the Special Service Squadron for the Argentine Centennial celebration.
Punta Arenas, Chile.....	June 8	June 9	1,039	Returning to the Pacific Station.
Fortescue Bay, Chile.....	June 9	June 10	90	Do.
Valparaiso, Chile.....	June 14	June 21	935	Do.
Talcahuano, Chile.....	June 22	June 25	240	Do.
Valparaiso, Chile.....	June 26	June 28	240	Do.
Southery (prison ship). Chief Boatswain WILLIAM L. HILL, commanding.				At the navy-yard, Portsmouth, N. H.
Standish (tug).....				At the Naval Academy, Annapolis, Md.
Sterett (destroyer).....				Under construction at the works of the Fore River Shipbuilding Co., Quincy, Mass.
Sterling (collier).....				Collier service on the Atlantic coast and West Indies until placed out of service.
[Placed out of service Apr. 30, 1910, at the navy-yard, Portsmouth, N. H.]				
Stewart (destroyer), Lieut. CHARLES E. SMITH, commanding. Relieved by Ensign HENRY G. SHONERD, Nov. 30, 1909. Relieved by Lieut. WILLIAM T. LIGHTLE, Jan. 10, 1910.				Attached to the Pacific Torpedo Fleet.
[Placed in full commission Nov. 18, 1909, at the navy-yard, Mare Island, Cal.]				
Stiletto (wooden torpedo boat).....				At the torpedo station, Newport, R. I.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
			<i>Knots.</i>	
Stingray (submarine), Ensign ELDRED B. ARMSTRONG, commanding. Relieved by Lieut. OWEN HILL, Jan. 17, 1910. Relieved by Ensign CLARENCE N. HINKAMP, Feb. 14, 1910. [Placed in commission Nov. 23, 1909, at the navy-yard, Boston, Mass.]				Attached to the Atlantic Torpedo Fleet.
St. Louis (cruiser, first class), Commander ALBERT GLEAVES, commanding. Relieved by Lieut. Commander WILLIAM V. PRATT, Nov. 5, 1909. Relieved by Lieut. GEORGE T. PETTINGILL, Apr. 2, 1910. [Placed in reserve Nov. 5, 1909, at the navy-yard, Puget Sound, Wash. Placed out of commission May 3, 1910, at the navy-yard, Puget Sound, Wash.]				
	1909.	1909.		
Honolulu, Hawaii.....	July 15	July 4		En route to Samoa.
Suva, Fiji Islands.....	July 15	July 23	2,952	Do.
Tutuila, Samoa.....	July 24	July 28	674	Preparing to return to United States.
Honolulu, Hawaii.....	Aug. 7	Aug. 15	2,280	Returning to United States.
Hilo, Hawaii.....	Aug. 16	Aug. 17	202	Do.
San Francisco, Cal.....	Aug. 22	Sept. 6	2,039	Special service.
Santa Monica, Cal.....	Sept. 7	Sept. 11	26	Do.
San Pedro, Cal.....	Sept. 11	Sept. 18	376	Do.
San Francisco, Cal.....	Sept. 19	Nov. 1		Do.
California City, Cal.....	Nov. 1	do		To coal ship.
Bremerton, Wash.....	Nov. 4		749	To place ship in reserve.
Stockton (torpedo boat), Lieut. JAMES O. RICHARDSON, commanding. Relieved by Lieut. FRANK H. SADLER, Sept. 15, 1909. [Placed in reserve Nov. 9, 1909, at the navy-yard, Charleston, S. C.]				In reserve at the navy-yard, Charleston, S. C.
Stranger (converted yacht).....				Loaned to the Naval Militia of Louisiana
Stringham (torpedo boat), Lieut. FRANK H. SADLER, commanding. Relieved by Lieut. HAROLD R. STARK, Sept. 15, 1909. [Placed in reserve Nov. 30, 1909, at the navy-yard, Charleston, S. C.]				At the navy-yard, Charleston, S. C.
Sturgeon (submarine).....				Under construction at the works of the Fore River Shipbuilding Co., Quincy, Mass.
Supply (station ship), Lieut. Commander EUGENE L. BISSET, commanding.	1909.	1909.		
Bremerton, Wash.....	Aug. 8	Aug. 5		Under repair.
Mare Island, Cal.....	Aug. 20	Aug. 11	733	En route Guam.
Honolulu, Hawaii.....	Aug. 20	Aug. 23	2,247	Do.
Guam, Midway Islands.....	Sept. 8	Oct. 2	3,347	Station ship at Guam.
Yokohama, Japan.....	Oct. 10	Nov. 7	1,382	On trip to Japan and China to give liberty and for change of climate.
Kobe, Japan.....	Nov. 9	Nov. 11	267	Do.
Shanghai, China.....	Nov. 16	Nov. 22	496	Do.
Guam, Midway Islands.....	Nov. 30		1,627	Resumed station.
Do.....	1910.	1910.		
Cavite, P. I.....	Mar. 29	Mar. 23		Station ship.
Olongapo, P. I.....	Apr. 3	Apr. 3	1,515	For docking and repairs.
Cavite, P. I.....	Apr. 7	Apr. 7	62	To dock ship.
Guam, Midway Islands.....	Apr. 30	Apr. 23	62	Under repair.
Nagasaki, Japan.....	June 17	June 11	1,517	Station ship.
		June 28	1,338	To give liberty.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Sylph (converted yacht), Lieut. ROGER WILLIAMS, commanding. Relieved by Lieut. Commander STEPHEN V. GRAHAM, Oct. 20, 1909. Relieved by Lieut. CHARLES R. TRAIN, Dec. 27, 1909.				
	1909.	1909.	<i>Knots</i>	
New York to Beverly, Mass.	July 2	.....	.....	Special service.
Gloucester and return.	July 8	July 8	22	Do.
Provincetown and return.	July 9	July 9	98	Do.
Biddeford Pool, Me.	July 13	July 14	66	Do.
Portland, Me.	July 14	do.	20	Do.
Biddeford Pool, Me.	do.	do.	20	Do.
Portsmouth, N. H.	do.	July 15	35	Do.
Beverly, Mass.	July 15	.....	45	Do.
Marblehead, Mass., and return to Beverly.	July 20	July 20	8	Do.
Boston, Mass.	July 24	July 25	21	Do.
Beverly, Mass.	July 25	.....	21	Do.
Gloucester and return to Beverly.	do.	July 25	22	Do.
Gloucester and return to Beverly.	July 27	July 27	22	Do.
Biddeford Pool.	July 29	July 30	66	Do.
Portland, Me.	July 30	do.	20	Do.
Biddeford Pool.	do.	do.	20	Do.
Beverly, Mass.	Aug. 2	.....	66	Do.
Gloucester and return to Beverly.	Aug. 4	Aug. 4	22	Do.
Rockport, Mass., and return to Beverly.	Aug. 20	Aug. 20	36	Do.
Biddeford Pool and return to Beverly.	Aug. 25	Aug. 25	132	Do.
Boston, Mass.	Aug. 26	Aug. 28	20	Do.
Beverly, Mass.	Aug. 28	.....	20	Do.
Marblehead and return to Beverly, Mass.	Aug. 29	Aug. 29	10	Do.
Biddeford Pool, Portland, and return to Biddeford Pool.	Sept. 7	Sept. 8	106	Do.
Beverly, Mass.	Sept. 8	Sept. 11	66	Do.
New York, N. Y.	Sept. 13	Sept. 15	267	Do.
Washington, D. C.	Sept. 16	Nov. 17	430	Do.
Mount Vernon, Va.	Nov. 17	do.	13	Do.
Washington, D. C.	do.	do.	13	Do.
	1910.	1910.		
Washington, D. C.	Mar. 21	Mar. 21	.....	Do.
Mattawoman Creek, Md.	Mar. 21	do.	48	Do.
Washington, D. C.	do.	Mar. 25	48	Do.
Mount Vernon, Va.	Mar. 25	do.	25	Do.
Washington, D. C.	do.	Mar. 26	25	Do.
Washington, D. C.	Mar. 26	June 14	25	Do.
Navy-yard, New York.	June 16	June 20	430	Do.
Block Island, R. I.	June 20	June 21	115	Do.
Beverly, Mass.	June 21	.....	172	Do.
Sylvia (converted yacht) .....	.....	.....	.....	Loaned to the Naval Militia, Pennsylvania.
Tacoma (cruiser, third class), Commander ALBERT P. NIBLACK, commanding. Relieved by Lieut. WALTER G. ROFER, May 31, 1910. Relieved by Commander ARCHIBALD H. DAVIS, June 8, 1910.				
	1909.	1909.		
San Juan, P. R.	July 5	July 7	1,231	Special service.
Guantanamo Bay, Cuba.	July 9	July 11	511	For coal and orders.
Savannah, Colombia.	July 14	July 15	540	Protecting American interests.
Colon, Panama.	July 17	July 18	336	For coal and provisions.
Bluefield, Nicaragua.	July 19	July 26	288	To relieve Marietta.
Little Corn Island, Nicaragua.	July 26	July 29	46	Boat exercises.
Bluefield, Nicaragua.	July 29	Aug. 1	46	Protecting American interests.
Little Corn Island, Nicaragua.	Aug. 1	Aug. 5	46	Adjusting compasses.
Bluefield, Nicaragua.	Aug. 5	Aug. 8	46	Protecting American interests.
Great Corn Island, Nicaragua.	Aug. 8	Aug. 13	37	Adjusting compasses.
Bluefield, Nicaragua.	Aug. 13	Aug. 19	37	Protecting American interests.
Colon, Panama.	Aug. 20	Aug. 21	273	For coal and provisions.
Bluefield, Nicaragua.	Aug. 25	Aug. 31	288	Resumed station. Protecting American interests.
Little Corn Island, Nicaragua.	Aug. 31	Sept. 3	44	Boat exercises.
Bluefield, Nicaragua.	Sept. 3	Sept. 6	44	Protecting American interests.
Port Limon, Costa Rica.	Sept. 7	Sept. 13	141	Cruising.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Bocas del Toro, Panama.....	1909. Sept. 14	1909. Sept. 14	<i>Nota.</i> 72	To take on board pilot for Chiriqui Lagoon.
Chiriqui Lagoon, Panama.....	do.....	Sept. 15	24	Swinging ship.
Bocas del Toro, Panama.....	do.....	Sept. 15	22	Landed Chiriqui Lagoon pilot.
Cristobal, Isthmian Canal Zone.....	Sept. 16	Sept. 23	148	Coaled ship.
Bocas del Toro, Panama.....	Sept. 24	Sept. 27	145	Cruising.
Cristobal, Isthmian Canal Zone.....	Sept. 28	.....	140	Do.
Target grounds, Cape Cruz, Cuba.....	Nov. 3	Nov. 7	746	To umpire target practice of Marietta.
Guantanamo Bay, Cuba.....	Nov. 8	Nov. 8	188	For stores.
Target grounds, Cape Cruz, Cuba.....	Nov. 9	Nov. 10	190	On target range.
Niquero, Cuba.....	Nov. 10	do.....	53	Locating tug Uncas.
Target grounds, Cape Cruz, Cuba.....	do.....	Nov. 11	53	On target range.
Guantanamo Bay, Cuba.....	Nov. 12	Nov. 14	188	For coal and stores.
Target grounds, Cape Cruz, Cuba.....	Nov. 15	Nov. 18	187	Completed umpiring Marietta's practice.
Guantanamo Bay, Cuba.....	Nov. 19	Nov. 19	186	Taking target-range buoys to naval station.
Cristobal, Isthmian Canal Zone.....	Nov. 22	Nov. 23	697	En route to Port Limon.
Port Limon, Costa Rica.....	Nov. 24	Nov. 28	193	Reported to commanding officer of the U. S. S. Des Moines.
Bocas del Toro, Panama.....	Nov. 28	Nov. 29	72	Searching for missing whaleboat and gig of Marietta.
Port Limon, Costa Rica.....	Nov. 29	Dec. 6	59	Do.
Cristobal, Isthmian Canal Zone.....	Dec. 7	Dec. 8	180	Taking man to hospital.
Port Limon, Costa Rica.....	Dec. 9	Dec. 11	192	Survey duty on coast of Costa Rica.
Bluefields, Nicaragua.....	Dec. 12	.....	151	Protecting American interests. In company with Des Moines, Prairie, Eagle, and Leonidas.
Bluefields, Nicaragua.....	1910. Jan. 3	1910. Jan. 3	.....	Protecting American interests.
Port Limon, Costa Rica.....	Jan. 4	Jan. 4	143	Do.
Bocas del Toro, Panama.....	do.....	Jan. 6	67	Do.
Greytown, Nicaragua.....	Jan. 7	Jan. 9	140	Do.
Bluefields, Nicaragua.....	Jan. 9	Jan. 17	71	Do.
Monkey Point, Nicaragua.....	Jan. 17	Jan. 18	28	Do.
Greytown, Nicaragua.....	Jan. 18	Jan. 21	37	Do.
Bluefields, Nicaragua.....	Jan. 21	Jan. 25	63	Do.
Port Limon, Costa Rica.....	Jan. 25	Feb. 2	125	Do.
Greytown, Nicaragua.....	Feb. 3	Feb. 7	80	Do.
Bluefields, Nicaragua.....	Feb. 7	Feb. 20	65	Do.
Port Limon, Costa Rica.....	Feb. 21	Mar. 10	132	Resumed survey work.
Bocas del Toro, Panama.....	Mar. 10	Mar. 20	67	To turn over surveying material to the Paducah.
Cristobal, Isthmian Canal zone.....	Mar. 21	Mar. 22	146	For stores.
Greytown, Nicaragua.....	Mar. 23	Mar. 23	268	To turn over the command on the east coast of Nicaragua to the Paducah.
Guantanamo Bay, Cuba.....	Mar. 27	Mar. 27	780	En route to Hampton Roads.
Lynnhaven Bay, Va.....	Apr. 1	Apr. 1	1,102	Anchored overnight.
Hampton Roads, Va.....	do.....	Apr. 6	15	For inspection.
Portsmouth, N. H.....	Apr. 9	Apr. 10	566	Do.
Tompkinsville, N. Y.....	Apr. 12	Apr. 14	386	Do.
Navy-yard, New York.....	Apr. 14	June 27	7	Under repair.
Sandy Hook, N. Y.....	June 27	do.....	17	Swinging ship.
Newport, R. I.....	June 28	.....	162	En route to Bristol, R. I., to take part in the Fourth of July celebration at that place.
Talbot (torpedo boat).....	.....	.....	.....	At the Torpedo Station, Newport, R. I.
Tallahassee (monitor).....	.....	.....	.....	At the navy-yard, Norfolk, Va.
Tarantula (submarine), Lieut. DAVID A. WEAVER, commanding. Relieved by Ensign CLARENCE N. HINKAMP, Jan. 11, 1910. Relieved by Lieut. FREDERICK V. MCNAIR, Feb. 9, 1910. Relieved by Ensign THEODORE G. ELLYSON, Apr. 16, 1910	.....	.....	.....	Attached to the Atlantic Torpedo Fleet.
[Placed in reserve Nov. 6, 1909, at the navy-yard, Charleston, S. C. Placed in full commission Apr. 15, 1910, at the navy-yard, Charleston, S. C.]	.....	.....	.....	.....
Tarpon (submarine), Lieut. FRENCH P. BASSETT, commanding.	.....	.....	.....	Attached to the Atlantic Torpedo Fleet.
[Placed in commission Nov. 23, 1910, at the navy-yard, Boston, Mass.]	.....	.....	.....	.....

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
			<i>Knots.</i>	
Tecumseh (tug) .....			.....	At the navy-yard, Washington, D. C.
Tennessee (armed cruiser), Capt. BRADLEY A. FISKE, commanding.				
	1909.	1909.		
Bremerton, Wash.		Aug. 18	.....	Under repair.
Seattle, Wash.	Aug. 18	Aug. 28	15	Duty in connection with fair.
San Francisco, Cal.	Aug. 31	Sept. 5	812	For coal and provisions.
Honolulu, Hawaii.	Sept. 10	Sept. 20	2,093	Cruising with the armored cruisers of the Pacific Fleet.
Maalaea Bay, Hawaii.	Sept. 20	Sept. 22	93	Do.
Hilo, Hawaii.	Sept. 23	Sept. 24	105	Do.
Honolulu, Hawaii.	Sept. 25	Oct. 5	194	Do.
Nares Harbor, Admiralty Islands.	Oct. 17	Oct. 25	3,624	Coaling.
Manila, P. I.	Oct. 30	Nov. 4	1,925	With Pacific Fleet to give liberty.
Cavite, P. I.	Nov. 4	Nov. 7	4	To coal ship.
Olongapo, P. I.	Nov. 7	Nov. 10	63	For calibration practice.
Manila, P. I.	Nov. 10	Nov. 20	63	Preparing for target practice and target practice.
Olongapo, P. I.	Nov. 21	Dec. 2	64	Do.
Cavite, P. I.	Dec. 2	Dec. 5	63	Do.
Olongapo, P. I.	Dec. 5	Dec. 6	63	Do.
Manila, P. I.	Dec. 6	Dec. 10	67	Compensating compasses.
Nimrod Sound, China.	Dec. 13	Dec. 14	988	Cruising in company with Washington.
Woosung, China.	Dec. 14	Dec. 30	135	
	1910.	1910.		
Heigun Island, Inland Sea of Japan.	Jan. 1	Jan. 2	.....	With the Washington.
Yokohama, Japan.	Jan. 3	Jan. 20	593	With Pacific Fleet.
Honolulu, Hawaii.	Jan. 31	Feb. 8	3,553	Do.
Bremerton, Wash.	Feb. 15	Mar. 19	2,430	With the Washington.
Panama, Panama.	Apr. 2	Apr. 12	4,059	In company with the South Dakota en route to Maldonado to join the Special Service Squadron.
Punta Arenas, Chile.	Apr. 25	May 1	3,961	Do.
Maldonado, Uruguay.	May 5	May 9	1,334	Joined the Special Service Squadron.
Bahia Blanca, Argentine.	May 15	June 5	507	With the Special Service Squadron for the Argentine Centennial Celebration.
Montevideo, Uruguay.	June 7	June 14	505	With the Special Service Squadron.
Rio de Janeiro, Brazil.	June 17	.....	1,036	Do.
Terror (monitor)				At the navy-yard, Philadelphia, Pa.
Terry (destroyer)				Under construction at the works of the Newport News Shipbuilding Co., Newport News, Va.
Texas (receiving ship), Commander WILLIAM A. GILL, commanding.				At the navy-yard, Charleston, S. C.
Thornton (torpedo boat), Lieut. CHARLES A. BLAKELY, commanding.				In reserve at the navy-yard, Charleston, S. C.
[Placed in reserve Dec. 22, 1909, at the navy-yard, Charleston, S. C.]				
Thrasher (submarine)				Under construction at the works of William Cramp & Sons, Philadelphia, Pa.
Tingey (torpedo boat), Ensign WARREN C. NIXON, commanding.				In reserve at the navy-yard, Charleston, S. C.
[Placed in reserve Dec. 22, 1909, at the navy-yard, Charleston, S. C.]				
Tonopah (monitor), Lieut. Commander DOUGLAS E. DISMUKES, commanding. Relieved by Capt. HARRY M. DOMBAUGH, Aug. 28, 1909. Relieved by Chief Gunner FRANK L. HOAGLAND, May 5, 1910.				
[Placed in reserve Aug. 28, 1909, at the Naval Academy, Annapolis, Md. The Tonopah was assigned to duty with the Naval Militia of New Jersey on Apr. 16, 1910.]				
	1909.	1909.		
New London, Conn.		July 6	.....	Naval Academy Practice Squadron.
Gardiners Bay.	July 6	July 9	18	Do.
New London, Conn.	July 9	July 12	19	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1909.	1909.	<i>Knots.</i>	
Gardiners Bay.....	July 12	July 16	17	Naval Academy Practice Squadron.
New London, Conn.....	July 16	July 19	18	Do.
Gardiners Bay.....	July 19	July 23	19	Do.
New London, Conn.....	July 23	July 26	18	Do.
Bradford, R. I.....	July 26	July 27	59	Do.
Newport, R. I.....	July 27	July 29	6	Do.
Boston, Mass.....	July 30	Aug. 3	164	Do.
Gloucester, Mass.....	Aug. 3	Aug. 5	20	Do.
Portsmouth, N. H.....	Aug. 5	Aug. 7	30	Do.
Portland, Me.....	Aug. 7	Aug. 10	46	Do.
Bath, Me.....	Aug. 10	Aug. 15	35	Do.
Bar Harbor, Me.....	Aug. 16	Aug. 18	104	Do.
Newport, R. I.....	Aug. 19	Aug. 23	275	Do.
Solomons Island, Md.....	Aug. 25	Aug. 26	485	Do.
Annapolis, Md.....	Aug. 27			To disembark midshipmen.
	1910.	1910.		
Annapolis, Md.....		Apr. 4		In reserve.
Norfolk, Va.....	Apr. 5	June 27		Under repair.
Hoboken, N. J.....	June 29			For duty with the Naval Militia of New Jersey.
Topeka (prison ship).....				At the navy-yard, Portsmouth, N. H. Auxiliary to the Southern.
Trafal (tug).....				At the navy-yard, New York.
Trippe (destroyer).....				Under construction at the Bath Iron Works, Bath, Me.
Triton (tug).....				At the navy-yard, Washington, D. C.
Truxtun (destroyer), Lieut. CHARLES S. KERRICK, commanding. Relieved by Ensign RANDOLPH P. SCUDDER, July 24, 1909.				Attached to the Pacific Torpedo Fleet.
Tuna (submarine).....				Under construction at the works of the Newport News Shipbuilding Co., Newport News, Va.
Unadilla (tug).....				At the navy-yard, Mare Island, Cal.
Uncas (tug), Chief Boatswain AUGUST WOHLTMAN, commanding. Relieved by Chief Boatswain PETER EMERY, Oct. 19, 1909.				The Uncas did duty at the naval station, Guantanamo Bay, and as tender to the Atlantic Fleet during the fiscal year. At the end of the fiscal year the Uncas is under repair at the Norfolk yard.
Utah (battle ship).....				Under construction at the works of the New York Shipbuilding Co., Camden, N. J.
Vermont (battle ship), Capt. FRANK F. FLETCHER, commanding. Relieved by Lieut. Commander ADELBERT ALTHOUSE, Feb. 25, 1910. Relieved by Capt. WALTER MCLEAN, Mar. 12, 1910.				
	1909.	1909.		
Provincetown, Mass.....	July 1	July 2		Ordered to Boston.
Boston, Mass.....	July 2	July 7	51	With First Division, Atlantic Fleet, to spend the Fourth of July.
Provincetown, Mass.....	July 7	Aug. 4	51	With Atlantic Fleet for maneuvers and exercises.
Hampton Roads, Va.....	Aug. 7	Aug. 11	665	Coaled ship.
Southern drill grounds.....	Aug. 11	Aug. 14	46	Target practice.
Hampton Roads, Va.....	Aug. 14	Aug. 15	46	Bore sighting guns.
Southern drill grounds.....	Aug. 15	Aug. 28	46	Target practice.
Hampton Roads, Va.....	Aug. 28	Aug. 29	46	Do.
Southern drill grounds.....	Aug. 29	Sept. 12	46	Do.
Hampton Roads, Va.....	Sept. 12	Sept. 16	46	Ordered to Bridgeport.
Bridgeport, Conn.....	Sept. 17	Sept. 21	401	To participate in celebration of Columbus Day.
New York City.....	Sept. 22	Oct. 9	213	With Atlantic Fleet for the Hudson-Fulton celebration.
Provincetown, Mass.....	Oct. 11	Oct. 11	395	En route to Boston.
Boston, Mass.....	do.	Dec. 3	46	For repairs.
Newport, R. I.....	Dec. 4	Dec. 5	254	For draft of men.
Southern drill grounds.....	Dec. 6	Dec. 10	234	To rejoin fleet.
Hampton Roads, Va.....	Dec. 10	Dec. 14	35	With Atlantic Fleet.
Southern drill grounds.....	Dec. 14	Dec. 16	35	Do.
Hampton Roads, Va.....	Dec. 16	Dec. 20	35	Do.
Ambrose Channel.....	Dec. 21	Dec. 22	306	En route to New York.
North River, New York City.....	Dec. 22		25	With Atlantic Fleet to spend holidays.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
New York City		Jan. 7		With Atlantic Fleet for the Christmas holidays.
Guantanamo Bay, Cuba	Jan. 12	Mar. 24	1,354	With Atlantic Fleet engaged in drills and exercises.
Hampton Roads, Va.	Mar. 28	Apr. 4	1,140	With Atlantic Fleet.
Southern drill grounds	Apr. 4	Apr. 11	77	Elementary target practice.
Hampton Roads, Va.	Apr. 11	Apr. 15	40	Do.
Southern drill grounds	Apr. 15	Apr. 27	400	Do.
Boston, Mass.	Apr. 29		498	For repairs.
Vestal (collier)				Collier service on the Atlantic coast and in the West Indies during the fiscal year.
[Placed in service Oct. 4, 1909, at the navy-yard, New York.]				
Vesuvius (torpedo practice ship)				Attached to the torpedo station, Newport, R. I.
[Placed in commission in reserve Feb. 14, 1910, at the navy-yard, Boston, Mass.]				
Vicksburg (gunboat), Commander ALEXANDER S. HALSTEAD, commanding.				
	1909.	1909.		
Corinto, Nicaragua		Aug. 22		Protecting American interests.
Panama, Panama	Aug. 25	Sept. 1	700	To coal ship.
Corinto, Nicaragua	Sept. 4	Sept. 6	723	Protecting American interests.
La Union, Salvador	Sept. 6	Sept. 21	70	Do.
La Libertad, Salvador	Sept. 21	Oct. 5	112	Do.
Acajutla, Salvador	Oct. 5	Oct. 21	38	Do.
San Jose del Guatemala	Oct. 21	Nov. 5	60	Do.
Acapulco, Mexico	Nov. 8	Nov. 14	616	Cruising.
San Jose del Guatemala	Nov. 17	Nov. 19	614	Protecting American interests.
Corinto, Nicaragua	Nov. 20		232	Do.
	1910.	1910.		
Corinto, Nicaragua		Jan. 4		Do.
Salina Cruz, Mexico	Jan. 6	Jan. 7	563	Do.
Corinto, Nicaragua	Jan. 10	Feb. 9	539	Do.
Acapulco, Mexico	Feb. 14	Feb. 14	842	En route to Mare Island.
Mare Island, Cal.	Feb. 24	May 12	1,816	Under repair.
San Francisco, Cal.	May 12	May 16	24	Proceeding to Corinto.
Acapulco, Mexico	May 24	May 26	1,838	Do.
Corinto, Nicaragua	May 30	June 29	837	Protecting American interests.
San Juan del Sur, Nicaragua	June 30	June 30	113	Do.
Vigilant (tug)				At the training station, San Francisco, Cal.
Villalobos (gunboat), Lieut. ARTHUR CRENSHAW, commanding. Relieved by Lieut. ROY C. SMITH, Aug. 3, 1909.				
	1909.	1909.		
Hanow, China		July 26		Chinese river service.
Nanking, China	July 27	July 28	388	Do.
Shanghai, China	July 29	Aug. 12	212	Do.
Chinkiang, China	Aug. 14	Aug. 16	165	Do.
Nanking, China	Aug. 16	Aug. 25	147	Do.
Kiukiang, China	Aug. 28	Sept. 6	246	Do.
Nanking, China	Sept. 8	Sept. 20	246	Do.
Shanghai, China	Sept. 21	Oct. 3	212	Do.
Nanking, China	Nov. 1	Nov. 6	212	Do.
Kiukiang, China	Nov. 8	Nov. 15	246	Do.
Anking, China	Nov. 11	Nov. 17	88	Do.
Nanking, China	Nov. 18	Nov. 27	158	Do.
Shanghai, China	Nov. 28	Dec. 1	212	Do.
Nimrod Sound, China	Dec. 2	Dec. 19	155	Do.
Shanghai, China	Dec. 20	Dec. 29	155	Do.
Woosung, China	Dec. 29	Dec. 30	15	Do.
Shanghai, China	Dec. 30	do.	15	Do.
Woosung, China	do.	Dec. 31	15	Do.
Shanghai, China	Dec. 31		15	Do.
	1910.	1910.		
Shanghai, China		Jan. 4		Do.
Woosung, China	Jan. 4	do.	15	Do.
Shanghai, China	do.	Jan. 5	15	Do.
Chinkiang, China	Jan. 6	Jan. 7	165	Do.
Nanking, China	Jan. 9	Jan. 18	47	Do.
Wuhu, China	Jan. 18	Jan. 23	72	Do.
Anking, China	Jan. 24	Jan. 28	106	Do.
Kiukiang, China	Jan. 31	Feb. 6	88	Do.
Wuhu, China	Feb. 7	Feb. 8	194	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
Nanking, China.....	Feb. 8	Feb. 9	52	Chinese river service.
Shanghai, China.....	Feb. 11	Mar. 1	212	Do.
Chinkingiang, China.....	Mar. 3	Mar. 5	165	Do.
Nanking, China.....	Mar. 5	Mar. 8	47	Do.
Wuhu, China.....	Mar. 8	Mar. 9	52	Do.
Anking, China.....	Mar. 10	Mar. 11	106	Do.
Huikiang, China.....	Mar. 11	Mar. 14	88	Do.
Hankow, China.....	Mar. 15	Mar. 22	142	Do.
Kiukiang, China.....	Mar. 23	Mar. 30	142	Do.
Nanking, China.....	Apr. 1	Apr. 2	.....	Do.
Shanghai, China.....	Apr. 3	Apr. 8	212	Do.
Woosung, China.....	Apr. 8	Apr. 9	15	Do.
Shanghai, China.....	Apr. 9	Apr. 10	15	Do.
Woosung, China.....	Apr. 10	Apr. 11	15	Do.
Huitau Bay, China.....	Apr. 14		546	For target practice in company with the Helena and Samar.
Target range, Huitau Bay, China.....		Apr. 23	60	Held elementary target practice.
Hankow, China.....	May 1	May 5	1,146	Chinese river service.
Chang Sha, China.....	May 7	June 20	250	Do.
Siangtau, China.....	June 20	June 21	30	Do.
Chang Sha, China.....	June 21	June 22	30	Do.
Ichang, China.....	June 25		380	Do.
Viper (submarine), Ensign ROBERT A. WHITE, commanding. Relieved by Ensign SLOAN DANENHOWER, Nov. 30, 1909. Relieved by Lieut. FREDERICK V. MCNAIR, Jan. 14, 1910. Relieved by Ensign ALFRED H. MILES, Apr. 28, 1910.				Attached to the Atlantic Torpedo Fleet.
[Placed in reserve Nov. 30, 1909, at the navy-yard, Charleston, S. C. Placed in full commission Apr. 15, 1910.]				
Virginia (battle ship), Capt. ALEXANDER SHARP, commanding. Relieved by Capt. JAMES H. GLENNON, Jan. 8, 1910.	1909.	1909.		
Portland, Me.....	July 2	July 6	.....	For the Fourth of July.
Ipswich Bay.....	July 7	July 7	156	Compensating compasses.
Cape Cod Bay.....	do.	Aug. 4	.....	With Atlantic Fleet. Preparing for target practice.
Hampton Roads, Va.....	Aug. 7	Aug. 10	694	With Atlantic Fleet.
Southern drill grounds.....	Aug. 10	Sept. 20	60	Target practice.
North River, New York City.....	Sept. 22	Oct. 5	239	With Atlantic Fleet for the Hudson-Fulton celebration.
Norfolk, Va.....	Oct. 6		279	For repairs.
	1910.	1910.		
Norfolk, Va.....	Jan. 18	Jan. 18	.....	Under repair.
Hampton Roads, Va.....	Jan. 20	Jan. 30	348	Sea trial of engines.
Guantanamo Bay, Cuba.....	Feb. 3	Mar. 24	1,115	With the Atlantic Fleet engaged in drills and exercises.
Hampton Roads, Va.....	Mar. 28	Apr. 4	1,075	With Atlantic Fleet.
Southern drill grounds.....	Apr. 4	Apr. 11	34	Elementary target practice.
Hampton Roads, Va.....	Apr. 11	Apr. 15	60	Do.
Southern drill grounds.....	Apr. 15	Apr. 27	60	Do.
Norfolk, Va.....	Apr. 29		70	Under repair.
Vixen (converted yacht).....				Loaned to the Naval Militia of New Jersey.
Vulcan (collier).....				Collier service on the Atlantic coast and in the West Indies.
Placed in service Oct. 2, 1909, at the navy-yard, Norfolk, Va.]				
Waban (tug).....				At the navy-yard, Pensacola, Fla.
Wabash (receiving ship), Capt. CHARLES E. FOX, commanding Relieved by Lieut. Commander HARLAN P. FERRILL, Dec. 16, 1909. Relieved by Capt. JAMES M. HELM, Dec. 31, 1909.				At the navy-yard, Boston, Mass.
Wahneta (tug).....				At the navy-yard, Norfolk, Va.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
			<i>Knots.</i>	
Walke (destroyer).....				Under construction at the works of the Fore River Shipbuilding Co., Quincy, Mass.
Warrington (destroyer).....				Under construction at the works of the William Cramp and Sons, Philadelphia, Pa.
Washington (armored cruiser), Capt. CHARLES C. ROGERS, commanding.	1909.	1909.		
Bremerton, Wash.....	Aug. 18	Aug. 18		Under repair.
Seattle, Wash.....	Aug. 18	Aug. 28	15	Duty in connection with exposition.
San Francisco, Cal.....	Aug. 31	Sept. 5	805	Coaling and taking on stores preparatory to cruise.
Honolulu, Hawaii.....	Sept. 10	Sept. 20	2,090	Cruising with armored cruisers of Pacific Fleet.
Maalaea Bay, Hawaii.....	Sept. 20	Sept. 22	90	Forced-draft speed trial.
Do.....	Sept. 22	do.....	75	Do.
Hilo, Hawaii.....	Sept. 23	Sept. 24	115	Cruising with armored cruisers of Pacific Fleet.
Honolulu, Hawaii.....	Sept. 25	Oct. 5	200	Do.
Nares Harbor, Admiralty Islands.....	Oct. 17	Oct. 25	3,614	To coal ship.
Manila, P. I.....	Oct. 30	Dec. 10	1,959	To give liberty and to hold target practice. Under way in Manila and Subic Bay.
Woosung, China.....	Dec. 14	Dec. 30	1,143	Coaling ship and giving liberty.
	1910.	1910.		
Yokohama, Japan.....	Jan. 3	Jan. 20	1,100	With Pacific Fleet.
Honolulu, Hawaii.....	Jan. 31	Feb. 8	3,469	Do.
Port Discovery, Wash.....	Feb. 15	Feb. 26	2,371	In quarantine.
Bremerton, Wash.....	Feb. 27	Feb. 28	60	For coal and stores.
San Francisco, Cal.....	Mar. 3	Mar. 18	820	In quarantine.
Bremerton, Wash.....	Mar. 21			Under repair.
Wasp (converted yacht).....				Loaned to the Naval Militia of New York.
West Virginia (armored cruiser), Lieut. Commander HENRY J. ZEIGEMEIER, commanding. Relieved by Capt. JOHN M. ORCHARD, Aug. 26, 1909.	1909.	1909.		
Mare Island, Cal.....	Aug. 7	Aug. 7		Repairs and alterations.
Hunters Point, Cal.....	Aug. 7	Aug. 11	29	To dock ship.
California City, Cal.....	Aug. 11	Aug. 12	15	To coal ship.
San Francisco, Cal.....	Aug. 12	Aug. 15	12	Liberty and stores.
Seattle, Wash.....	Aug. 18	Aug. 23	824	With First Squadron.
Vashon Island, Wash.....	Aug. 23	do.....	32	Steaming trials.
Seattle, Wash.....	do.....	Aug. 28	32	With First Squadron.
Mare Island Light, Cal.....	Aug. 31	Sept. 2	848	For coal, stores, and ammunition.
San Francisco, Cal.....	Sept. 2	Sept. 5	26	To give liberty.
Honolulu, Hawaii.....	Sept. 10	Sept. 20	2,089	With First Squadron.
Maalaea Bay, Hawaii.....	Sept. 20	Sept. 22	88	Steaming trials.
Do.....	Sept. 22	Sept. 23	91	Do.
Kesakua Bay, Hawaii.....	Sept. 23	Sept. 24	90	Maneuvers with Maryland.
Honolulu, Hawaii.....	Sept. 24	Oct. 5	90	With First Squadron.
Nares Harbor, Admiralty Islands.....	Oct. 17	Oct. 25	3,561	Coaled ship.
Manila, P. I.....	Oct. 30	Nov. 4	1,971	With Pacific Fleet to give liberty.
Cavite, P. I.....	Nov. 4	Nov. 6	9	To coal ship.
Olongapo, P. I.....	Nov. 6	Nov. 11	61	Calibration practice.
Manila Bay, P. I.....	Nov. 11	Nov. 21	65	Target practice.
Subic Bay, P. I.....	Nov. 21	Dec. 6	67	To dock ship.
Manila, P. I.....	Dec. 6	Dec. 10	66	With Pacific Fleet.
Hongkong, China.....	Dec. 12	Dec. 30	654	With Pennsylvania to give liberty.
	1910.	1910.		
Nagasaki, Japan.....	Jan. 3	Jan. 13	1,078	With Pennsylvania.
Yokohama, Japan.....	Jan. 15	Jan. 20	738	With First Squadron.
Honolulu, Hawaii.....	Jan. 31	Feb. 8	3,463	With First Squadron. To give liberty.
San Francisco, Cal.....	Feb. 14	Feb. 25	2,081	To give liberty.
California City, Cal.....	Feb. 25	Feb. 27	7	To coal ship.
San Francisco, Cal.....	Feb. 27	Mar. 1	7	For stores and ammunition.
Santa Barbara, Cal.....	Mar. 2	Mar. 15	295	Preparing for target practice.
Santa Barbara Channel, Cal.....	Mar. 15	Mar. 17	32	Subcaliber practice.
Mare Island Light, Cal.....	Mar. 18	Mar. 20	293	For coal and stores.
Sausalito, Cal.....	Mar. 20	Mar. 21	23	Bore sighting.
Santa Barbara, Cal.....	Mar. 22	Mar. 24	285	Target-practice drills.
Santa Barbara Channel, Cal.....	Mar. 24	do.....	32	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
Santa Barbara, Cal.....	1910. Mar. 24	1910. Mar. 27	<i>Knots.</i> 32	Target-practice drills.
Santa Barbara Channel, Cal.....	Mar. 27	Mar. 28	32	Do.
Capitola, Cal.....	Apr. 4	Apr. 6	503	Mining practice with Maryland and California.
Mare Island, Cal.....	Apr. 7		88	Under repair
Wheeling (gunboat), Commander EDWARD W. EBERLE, commanding.				
[Placed in commission May 3, 1910, at the navy-yard, Puget Sound, Wash.]				
Bremerton, Wash.....	1910. June 2	1910. May 30		Fitting out.
San Pablo Bay, Cal.....	June 2	June 3	830	En route Mare Island.
Mare Island, Cal.....	June 3	June 4	15	For ammunition.
San Francisco, Cal.....	June 4	June 10	27	Preparing for trip to Atlantic coast.
Bremerton, Wash.....	June 14	June 17	820	Do.
Departure Bay, Vancouver Island..	June 17	June 18	132	En route to the navy-yard, Portsmouth, N. H., in company with the Petrel.
Alert Bay, Cormorant Island.....	June 18	June 19	169	Do.
Dutch Harbor, Unalaska Island....	June 26	June 29	1,580	Do.
Whipple (destroyer), Lieut. JOHN G. CHURCH, commanding.				Attached to the Pacific Torpedo Fleet.
Wilkes ((torpedo boat), Ensign GEORGE C. PEGRAM, commanding.				In reserve at the navy-yard, Charleston, S. C.
[Placed in reserve Dec. 22, 1909, at the navy-yard, Charleston, S. C.]				
Wilmington (gunboat), Commander EDWARD LLOYD, commanding. Relieved by Commander GEORGE R. SALISBURY, Feb. 4, 1910.				
Shanghai, China.....	1909. July 6	1909. July 6		Chinese river service.
Woosung, China.....	July 6	July 8	14	Do.
Klusan Point, China.....	July 8	July 9	71	Do.
Nanking, China.....	July 9	July 13	126	Do.
Do.....	July 13	July 14	18	Do.
Do.....	July 14	July 15	17	Do.
Wuhu, China.....	July 15	July 17	52	Do.
Nanking, China.....	July 17	July 19	106	Do.
Kluklang, China.....	July 19	July 21	88	Do.
Porpoise Bluff, China.....	July 21	July 22	116	Do.
Hankow, China.....	July 22	July 26	28	Do.
Christmas Island Beacon, China....	July 26	July 27	28	Do.
Nanking, China.....	July 27	July 29	170	Do.
Chinkiang, China.....	July 29	July 30	47	Do.
Shanghai, China.....	July 30	Aug. 23	165	Do.
Woosung, China.....	Aug. 23	Aug. 24	14	Do.
Flake Island, China.....	Aug. 24	Aug. 25	141	Target practice.
Do.....	Aug. 25	Aug. 26	1	Do.
Do.....	Aug. 26	Aug. 30	15	Do.
Do.....	Aug. 30	Aug. 31	15	Do.
Do.....	Aug. 31	Sept. 1	15	Do.
Do.....	Sept. 1	Sept. 2	15	Do.
Do.....	Sept. 2	Sept. 3	15	Do.
Woosung, China.....	Sept. 3	Sept. 4	141	Chinese river service.
Shanghai, China.....	Sept. 4	Sept. 10	14	Do.
Woosung, China.....	Sept. 10	Sept. 11	14	Do.
Fairway Buoy, China.....	Sept. 11	do...	41	Do.
Woosung, China.....	do...	Sept. 14	41	Do.
Shanghai, China.....	Sept. 11	Sept. 23	14	Do.
Upper Acataeon Buoy, China.....	Sept. 23	Sept. 24	48	Do.
Ta Chiang Forts, China.....	Sept. 24	Sept. 25	101	Do.
Nanking, China.....	Sept. 25	Oct. 1	63	Do.
Do.....	do	do		Do.
Wuhu, China.....	Oct. 1	Oct. 2	52	Do.
Taitzuchi Light Boat.....	Oct. 2	Oct. 3	91	Do.
Anking, China.....	Oct. 3	Oct. 4	15	Do.
Kluklang, China.....	Oct. 4	Oct. 7	88	Do.
Gravener Island Light Boat.....	Oct. 7	Oct. 8	106	Do.
Hankow, China.....	Oct. 8	Oct. 15	36	Do.
Spencer Rock Light Buoy.....	Oct. 15	Oct. 16	200	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1909.	1909.	<i>Knots.</i>	
Nanking, China.....	Oct. 16	Oct. 19	188	Chinese river service.
Chinkiang, China.....	Oct. 19	Oct. 20	47	Do.
Woosung, China.....	Oct. 20	Oct. 21	151	Do.
Shanghai, China.....	Oct. 21	Nov. 8	14	Do.
Southwest Horn Light.....	Nov. 8	Nov. 9	84	Do.
West Volcano Light.....	Nov. 9	Nov. 10	20	Do.
Nimrod Sound, China.....	Nov. 10	Nov. 11	85	Selecting calibration range.
Do.....	Nov. 11	Nov. 12	58	Subcaliber practice.
Kultoon Light.....	Nov. 12	Nov. 13	125	Chinese river service.
Shanghai, China.....	Nov. 13	Dec. 8	30	Do.
Southwest Horn Light.....	Dec. 8	Dec. 9	84	Do.
Flake Island, China.....	Dec. 9	Dec. 10	71	Do.
Do.....	Dec. 10	Dec. 13	1	Do.
Mun Dun San Island.....	Dec. 13	Dec. 14	25	To meet Tennessee and Washington.
Flake Island, China.....	Dec. 14	Dec. 15	24	Do.
Do.....	Dec. 15	Dec. 17	32	Day spotting practice.
Do.....	Dec. 17	Dec. 18	50	Day battle practice.
Do.....	Dec. 18	Dec. 19	12	Night spotting practice.
Do.....	Dec. 19	Dec. 20	13	Night battle practice.
Do.....	Dec. 20	Dec. 21	15	Do.
Woosung, China.....	Dec. 21	Dec. 22	141	Chinese river service.
Shanghai, China.....	Dec. 22	Dec. 23	14	Do.
Woosung, China.....	Dec. 23	do.	14	Do.
Shanghai, China.....	Dec. 23	Dec. 27	14	Do.
Woosung, China.....	Dec. 27	Dec. 28	14	Do.
Shanghai, China.....	Dec. 28	Dec. 31	14	Do.
	1910.	1910.		
Shanghai, China.....	Jan. 6	Jan. 6	.....	Cruising on the coast of China.
Hen and Chicks Island.....	Jan. 6	Jan. 7	74	Do.
Chusan Island.....	Jan. 7	Jan. 8	60	Do.
Tai Chan Islands.....	Jan. 8	Jan. 9	95	Do.
Nam Ki Islands.....	Jan. 9	Jan. 10	77	Do.
Tung Sha Road.....	Jan. 10	Jan. 11	118	Do.
Dodd Island.....	Jan. 11	Jan. 12	135	Do.
Amoy, China.....	Jan. 12	Jan. 15	34	Do.
Manon Islands.....	Jan. 15	Jan. 16	100	Do.
Swatow, China.....	Jan. 16	Jan. 19	27	Do.
Hongkong, China.....	Jan. 20	Feb. 14	176	Do.
Canton, China.....	Feb. 14	Feb. 23	83	Do.
Hongkong, China.....	Feb. 23	Mar. 14	83	Do.
Bluff Point, China.....	Mar. 14	Mar. 15	65	Do.
Macao, China.....	Mar. 15	Mar. 17	48	Do.
Hongkong, China.....	Mar. 17	Mar. 31	42	Do.
Tsingku, China.....	Mar. 31	Apr. 1	44	Do.
Tungao, China.....	Apr. 1	Apr. 2	82	Do.
Swatow, China.....	Apr. 2	Apr. 3	50	Do.
Amoy, China.....	Apr. 4	Apr. 5	127	Do.
Huitau Bay, China.....	Apr. 5	Apr. 6	35	Do.
Leeoan Bay, China.....	Apr. 6	Apr. 9	15	Do.
Amoy, China.....	Apr. 9	Apr. 10	20	Do.
Leeoan Bay, China.....	Apr. 10	Apr. 13	20	Do.
Quemoy Bay, China.....	Apr. 13	Apr. 14	10	Do.
Huitau Bay, China.....	Apr. 14	Apr. 17	23	Target practice.
Amoy, China.....	Apr. 17	Apr. 19	25	In company with Helena, Villalobos, and Samar.
Huitau Bay, China.....	Apr. 19	Apr. 24	37	Target practice.
Amoy, China.....	Apr. 24	May 17	2	Cruising on the coast of China.
Crick Bay, China.....	May 17	May 19	79	Do.
Swatow, China.....	May 19	May 21	50	Do.
Tai Sami, China.....	May 21	May 23	108	Do.
Hongkong, China.....	May 23	June 8	78	Do.
Macao, China.....	June 8	June 11	45	Do.
Hongkong, China.....	June 11	.....	45	Do.
Winslow (torpedo boat).....				In reserve at the navy-yard, Boston, Mass.
Wisconsin (battle ship), Capt. FRANK E. BEATTY, commanding. Relieved by Capt. BEN W. HODGES, Jan. 3, 1910.				
	1909.	1909.		
Portland, Me.....	July 2	July 6	.....	For the Fourth of July.
Rockport, Mass.....	July 6	July 7	65	Cruising.
Provincetown, Mass.....	July 7	Aug. 4	45	Joined fleet, calibration practice.
Southern Roads, Va.....	Aug. 7	Aug. 9	510	With fleet.
Southern drill grounds.....	Aug. 9	Aug. 21	50	Record target practice.
Hampton Roads, Va.....	Aug. 21	Aug. 22	50	To bore sight guns.
Southern drill grounds.....	Aug. 22	Spt. 9	50	Day and night battle practice.
Hampton Roads, Va.....	Sept. 10	Sept. 11	50	To coal ship.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1909.	1909.	<i>Knots.</i>	
Southern drill grounds.....	Sept. 11	Sept. 12	50	Division battle practice.
Hampton Roads, Va.....	Sept. 12	Sept. 30	50	To coal and paint ship and take on stores.
North River, New York City.....	Sept. 22	Oct. 5	300	With Atlantic Fleet for the Hudson-Fulton Celebration.
Anchorage off Portsmouth, N. H.....	Oct. 7	Oct. 7	409	En route to the Portsmouth Navy-Yard.
Portsmouth, N. H.....	do.	Nov. 28	8	Under repair.
Anchorage off Newport, R. I.....	Nov. 29	Nov. 30	257	En route to Newport.
Newport, R. I.....	Nov. 30	do.	10	For drafts of men for fleet.
Southern drill grounds.....	Dec. 1	Dec. 4	323	Joined Atlantic Fleet for maneuvers.
Hampton Roads, Va.....	Dec. 4	Dec. 6	36	With Atlantic Fleet.
Southern drill grounds.....	Dec. 6	Dec. 10	35	Do.
Hampton Roads, Va.....	Dec. 10	Dec. 14	31	Do.
Southern drill grounds.....	Dec. 14	Dec. 16	31	Do.
Hampton Roads, Va.....	Dec. 16	Dec. 20	35	Do.
Anchorage off Ambrose Channel.....	Dec. 31	Dec. 21	306	En route to New York.
North River, New York City.....	Dec. 22	do.	28	With Atlantic Fleet to spend the Christmas holidays.
	1910.	1910.		
New York City.....	Jan. 7	Jan. 7	do.	With Atlantic Fleet.
Tompkinsville, N. Y.....	Jan. 7	do.	15	Ordered to Guantanamo Bay.
Guantanamo Bay, Cuba.....	Jan. 12	Mar. 19	1,404	With Atlantic Fleet engaged in drills and exercises.
Tompkinsville, N. Y.....	Mar. 24	Mar. 31	1,339	En route to Portsmouth, N. H., to go in reserve.
New Orleans, La.....	Apr. 7	Apr. 15	1,572	To participate in the celebration in connection with the Mystic Shriners' convention.
New York City.....	Apr. 22	do.	1,381	To discharge ammunition.
Portsmouth, N. H.....	Apr. 27	do.	218	To go in reserve.
Wolverine (gunboat), Commander WILLIAM F. WHITE, commanding.				
	1909.	1909.		
Detroit, Mich.....	July 3	July 3	do.	Recruiting.
Toledo, Ohio.....	July 3	July 12	50	Do.
Port Huron, Mich.....	July 12	July 13	100	Do.
Mackinac Island, Mich.....	July 14	July 15	206	Do.
Ludington, Mich.....	July 16	July 17	150	Do.
Muskegon, Mich.....	July 17	July 19	48	Do.
Holland, Mich.....	July 19	do.	35	Do.
St. Joseph, Mich.....	July 20	July 21	43	Do.
Michigan City, Ind.....	July 21	July 22	30	Do.
Gary, Ind.....	July 22	do.	19	Do.
Chicago, Ill.....	July 23	July 31	20	Do.
Milwaukee, Wis.....	July 31	Aug. 6	72	Do.
Ludington, Mich.....	Aug. 7	Aug. 8	83	Do.
Escanaba, Mich.....	Aug. 9	Aug. 10	114	Do.
South Manitow Island, Mich.....	Aug. 11	Aug. 11	71	Do.
Mackinac Island, Mich.....	do.	Aug. 14	90	Do.
Cheboygan, Mich.....	Aug. 14	do.	13	Do.
Bay City, Mich.....	Aug. 15	Aug. 17	164	Do.
Saginaw, Mich.....	Aug. 17	Aug. 19	22	Do.
Bay City, Mich.....	Aug. 19	Aug. 20	22	Do.
Port Huron, Mich.....	Aug. 21	Aug. 22	168	Do.
Toledo, Ohio.....	Aug. 22	Aug. 30	100	Do.
Detroit, Mich.....	Aug. 30	Sept. 5	50	Do.
Erie, Pa.....	Sept. 6	Sept. 11	164	Do.
Dunkirk, N. Y.....	Sept. 11	Sept. 14	39	Do.
Buffalo, N. Y.....	Sept. 14	Sept. 20	32	Do.
Erie, Pa.....	Sept. 20	do.	69	To go into winter quarters.
	1910.	1910.		
Erie, Pa.....	May 2	May 2	do.	In winter quarters.
Cleveland, Ohio.....	May 2	May 7	91	Recruiting.
Toledo, Ohio.....	May 7	May 17	83	Do.
Detroit, Mich.....	May 17	May 20	45	Do.
Sandusky, Ohio.....	May 20	May 27	62	Do.
Erie, Pa.....	May 27	May 31	130	Memorial Day exercises.
Detroit, Mich.....	June 1	June 1	164	Recruiting.
Mackinaw, Mich.....	June 2	June 3	268	Do.
Muskegon, Mich.....	June 4	June 9	197	Do.
Holland, Mich.....	June 9	June 11	37	Do.
Benton Harbor and St. Joseph, Mich.....	June 11	June 16	46	Do.
Michigan City, Ind.....	June 16	June 18	30	Do.
Chicago, Ill.....	June 18	June 23	39	Do.
Racine, Wis.....	June 23	June 29	60	Do.
Milwaukee, Wis.....	June 29	June 30	20	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
			<i>Knots.</i>	
Wompatuck (tug).....				At the naval station, Olongapo, P. I.
Worden (destroyer), Lieut. FREDERIC N. FREEMAN, commanding. [Placed in reserve Nov. 18, 1909, at the navy-yard, Charleston, S. C.]				In reserve at the navy-yard, Charleston, S. C.
Wyoming (battle ship).....				Under construction at the works of William Cramp & Sons, Philadelphia, Pa.
Yankee (transport).....				Out of commission in Buzzards Bay.
Yankton (tender), Lieut. Commander CHARLES B. MCVAY, commanding. Relieved by Lieut. ORIE W. FOWLER, Apr. 1, 1910.				
	1909.	1909.		
Bradford, R. I.....	July 1	July 1		Tender to Atlantic Fleet.
Jamestown, R. I.....	do.	July 6	7	Do.
Provincetown, Mass.....	July 6	July 18	140	Do.
Boston, Mass.....	July 18	July 19	47	Do.
Provincetown, Mass.....	July 19	Aug. 4	52	Do.
Hampton Roads, Va.....	Aug. 7	Sept. 20	470	Tender to Atlantic Fleet. During this period the vessel was on duty at Hampton Roads, southern drill grounds, and the Norfolk yard.
Tompkinsville, N. Y.....	Sept. 22	Sept. 22	276	Tender to Atlantic Fleet.
North River, New York City.....	do.	Oct. 9	14	Do.
Navy-yard, New York.....	Oct. 9	Nov. 30	12	Under repair.
Hampton Roads, Va.....	Dec. 1	Dec. 20	286	Tender to Atlantic Fleet at Hampton Roads and on the southern drill grounds.
Annapolis, Md.....	Dec. 21		128	To spend the Christmas holidays.
	1910.	1910.		
Annapolis, Md.....		Jan. 3		Leave for holidays.
Hampton Roads, Va.....	Jan. 4	Jan. 8	136	Coal and provisions.
Guantanamo Bay, Cuba.....	Jan. 13	Jan. 22	1,110	Preparing for record small-arm practice.
Port Escondido, Cuba.....	Jan. 22	do.	11	Laying out buoys at entrance to harbor.
Guantanamo Bay, Cuba.....	do.	Jan. 31	11	Holding record small-arm practice.
Port Escondido, Cuba.....	Jan. 31	Feb. 1	12	Investigating rumor about wreck.
Guantanamo Bay, Cuba.....	Feb. 2	Feb. 2	13	Holding record small-arm practice.
Port Escondido, Cuba.....	do.	do.	11	Inspection by commander in chief of harbor.
Guantanamo Bay, Cuba.....	do.	Feb. 8	11	Holding record small-arm practice.
Santiago, Cuba.....	Feb. 8	do.	52	Carrying officer as passenger to Santiago.
Guantanamo Bay, Cuba.....	do.	Feb. 14	52	Holding record small-arm practice.
Port Antonio, Jamaica.....	Feb. 15	Feb. 16	170	Testing out De Laney feed-water heater by board.
Guantanamo Bay, Cuba.....	Feb. 17	Feb. 25	132	Holding small-arm record practice; preparing for elementary target practice.
Santiago, Cuba.....	Feb. 25	Feb. 27	52	Carrying Rear-Admiral Osterhaus and Captain Fletcher as passengers to Santiago, Cuba.
Guantanamo Bay, Cuba.....	Feb. 27	Mar. 9	52	Holding record small-arm practice; preparing for elementary practice.
Santiago, Cuba.....	Mar. 9	Mar. 10	52	Carrying Captain Grant as passenger to Santiago.
Guantanamo Bay, Cuba.....	Mar. 10	Mar. 11	52	Holding rifle team practice for fleet competition.
Santiago, Cuba.....	Mar. 11	Mar. 12	52	Carrying Captain McLean as passenger from Santiago to Guantanamo.
Guantanamo Bay, Cuba.....	Mar. 12	Mar. 19	52	Firing in fleet rifle match; coaling ship and preparing for elementary target practice.
Hampton Roads, Va.....	Mar. 25	Apr. 6	1,121	Cleaning and painting ship and preparing for elementary target practice.
Cape Henry, Va.....	Apr. 6	Apr. 7	30	Tender to Atlantic Fleet.
Hampton Roads, Va.....	Apr. 7	Apr. 12	30	Do.
Cape Henry, Va.....	Apr. 12	Apr. 13	30	Do.
Hampton Roads, Va.....	Apr. 13	Apr. 15	30	Do.
Cape Henry, Va.....	Apr. 15	do.	30	Do.

Movements of vessels—Continued.

Name of vessel and port visited.	Date of arrival.	Date of departure.	Distance steamed.	Remarks.
	1910.	1910.	<i>Knots.</i>	
Hampton Roads, Va.....	Apr. 15	Apr. 16	30	Tender to Atlantic Fleet.
Southern drill grounds.....	Apr. 16	Apr. 18	34	Do.
Hampton Roads, Va.....	Apr. 18	Apr. 20	34	Do.
Southern drill grounds.....	Apr. 20	do.	75	Do.
Hampton Roads, Va.....	Apr. 21	Apr. 22	75	Do.
Southern drill grounds.....	Apr. 22	Apr. 23	75	Do.
Hampton Roads, Va.....	Apr. 23	do.	75	Do.
Southern drill grounds.....	do.	Apr. 24	75	Do.
Hampton Roads, Va.....	Apr. 24	do.	75	Do.
Southern drill grounds.....	do.	do.	75	Do.
Hampton Roads, Va.....	Apr. 25	Apr. 25	75	Do.
Southern drill grounds.....	do.	do.	75	Do.
Hampton Roads, Va.....	Apr. 26	Apr. 26	75	Do.
Southern drill grounds.....	do.	do.	75	Do.
Hampton Roads, Va.....	Apr. 27	Apr. 28	75	Do.
Tompkinsville, N. Y.....	Apr. 29	May 3	280	Do.
Navy-yard, New York.....	May 3	June 27	8	Do.
East River, New York City.....	June 27	do.	3	Do.
Yankee (wooden steam vessel).....				Loaned to the Naval Militia, Michigan.
Yorktown (gunboat), Commander HARRY A. FIELD, commanding. Relieved by Commander VICTOR BLUE, Mar. 10, 1910.				
	1900.	1900.		
Seattle, Wash.....	July 3	July 17		Duty in connection with exposition.
Port Angeles, Wash.....	July 17	July 19	68	Cruising under orders of commander in chief.
Esquimalt, British Columbia.....	July 19	July 22	20	Do.
Port Townsend, Wash.....	July 22	July 24	36	Do.
Seattle, Wash.....	July 24	Aug. 2	37	Duty in connection with exposition.
Anacortes, Wash.....	Aug. 2	Aug. 6	68	For the G. A. R. encampment.
Bremerton, Wash.....	Aug. 6	Aug. 10	74	For coal and stores.
Hoods Canal, Wash.....	Aug. 12	Aug. 12	48	Cruising under orders of commander in chief.
Seattle, Wash.....	do.	Aug. 24	48	Duty in connection with exposition.
Grays Harbor, Wash.....	Aug. 27	Aug. 30	238	To pay visit at request of citizens.
Seattle, Wash.....	Aug. 31	Sept. 30	238	Duty in connection with exposition.
Bremerton, Wash.....	Sept. 30	Oct. 2	12	For coal and stores.
Seattle, Wash.....	Oct. 2	Oct. 5	13	Duty in connection with the exposition.
Blaine, Wash.....	Oct. 5	Oct. 8	93	With Pacific Torpedo Fleet.
Boundary Bay, Wash.....	Oct. 8	do.	105	Do.
Bremerton, Wash.....	do.	Oct. 10	96	For coal and stores.
San Francisco, Cal.....	Oct. 13	Oct. 25	815	For the Portola festival.
Mare Island, Cal.....	Oct. 25	Oct. 27	24	For coal and stores.
Magdalena Bay, Mexico.....	Oct. 31	Dec. 3	1,077	Assisting at target practice of Pacific Torpedo Fleet.
Acapulco, Mexico.....	Dec. 6	Dec. 9	839	To coal ship.
Corinto, Nicaragua.....	Dec. 13	Dec. 23	829	Duty with Nicaraguan Expeditionary Squadron.
Gulf of Fonseca.....	Dec. 23	Dec. 25	83	Do.
Corinto, Nicaragua.....	Dec. 25	do.	63	Do.
	1910.	1910.		
Corinto, Nicaragua.....		Mar. 27		With the Nicaraguan Expeditionary Squadron protecting American interests.
Acapulco, Mexico.....	Mar. 31	Apr. 1	828	En route to the navy-yard, Mare Island, Cal.
Mare Island, Cal.....	Apr. 11	May 21	1,812	For repairs and docking.
San Francisco, Cal.....	May 21	June 8	24	Awaiting orders.
California City, Cal.....	June 8	June 9	8	To coal ship.
San Francisco, Cal.....	June 9	June 12	7	Awaiting orders.
Monterey, Cal.....	June 13	June 14	96	Dedication of Sloat monument.
San Francisco, Cal.....	June 15	June 16	96	For stores.
Astoria, Oregon.....	June 19	June 26	576	For G. A. R. reunion.
Esquimalt, British Columbia.....	June 27	June 30	212	Ordinary visit.
Anacortes, Wash.....	June 30	do.	38	For Fourth of July celebration.

SALE OF CONDEMNED VESSELS.

During the fiscal year ending June 30, 1910, the U. S. S. *Enterprise* was stricken from the Navy Register in pursuance of section 2 of the act approved August 5, 1882, after condemnation by a board of survey as unfit for further use as a naval vessel. The U. S. Navy coal barges Nos. 8 and 42 and the U. S. Navy barge or launch *Undine* were also found unfit for further military use by boards of survey and appraisal, and, with the *Enterprise*, were offered for sale by public advertisement and sold in each case to the highest bidder in accordance with the conditions of the act of Congress approved March 3, 1883. The appraised values of these craft as fixed by boards of survey and appraisal and the navy-yards at which they were located at the time of sale were as follows:

U. S. S. <i>Enterprise</i> , navy-yard, Boston, Mass.	\$7,000
U. S. Navy coal barge No. 42, navy-yard, Mare Island, Cal.	400
U. S. Navy coal barge No. 8, naval station, Key West, Fla.	1,000
U. S. Navy barge or launch <i>Undine</i> , navy-yard, Brooklyn, N. Y.	2,000

The following schedules show the bids received, the dates of opening bids, and the successful bidder for each vessel:

U. S. S. <i>Enterprise</i> (sealed proposals opened Oct. 1, 1909):	
John F. Burke, Boston, Mass.	^a \$11,037.75
Richard T. Green Company, Chelsea, Mass.	9,151.65
John H. Gregory, Perth Amboy, N. J.	8,365.00
John Hallett, Boston, Mass.	7,750.00
Everett W. Wallace, Millbridge, Me.	2,650.00
U. S. Navy coal barge No. 42 (sealed proposals opened Oct. 1, 1909):	
John Barneson, San Francisco, Cal.	^a 510.00
U. S. Navy coal barge No. 8 (sealed proposals opened Nov. 23, 1909):	
Key West Ice Company, Key West, Fla.	^a 410.00
U. S. Navy barge or launch <i>Undine</i> (sealed proposals opened May 11, 1910):	
A. Olsen, Brooklyn, N. Y.	^a 870.00
William J. Bannerman, Brooklyn, N. Y.	356.00

After deducting the expenses of advertising the sales of the four vessels above mentioned, \$698.55, the balance, \$12,129.20, was covered into the Treasury as "Miscellaneous receipts" on account of "Proceeds of government property," in accordance with section 3618, Revised Statutes.

^a Proposal accepted.

Summary of labor board reports for the year ending June 30, 1910, and comparisons of totals for 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, and 1909.

Navy-yard.	Applications for employment.	Rejected by the labor board as not eligible under the rules.	Called for by heads of labor departments.	Certified for employment to heads of labor departments.	Rejected by heads of departments as not qualified.	Declined service.	Failed to report for employment.
Portsmouth.....	897	5	1,158	1,109	2	16	219
Boston.....	2,252	.....	3,217	3,173	.....	24	1,136
New York.....	5,876	106	4,725	4,672	7	21	1,450
Philadelphia.....	3,000	18	3,906	3,767	15	97	1,373
Washington.....	1,173	11	491	452	.....	10	79
Norfolk.....	2,989	70	3,251	3,254	42	3	902
Charleston.....	1,215	29	1,381	1,330	37	10	522
Pensacola.....	226	2	312	153	.....	1	161
Mare Island.....	2,712	12	2,611	2,361	22	1	828
Puget Sound.....	1,860	73	2,274	1,659	6	6	627
Naval torpedo station, Newport.....	1,491	40	375	714	71	67	206
Total—1910.....	23,691	366	23,701	22,644	202	256	7,503
1909.....	30,984	352	23,115	21,583	124	239	6,134
1908.....	33,599	169	24,406	20,628	150	296	5,551
1907.....	22,220	215	19,511	17,235	163	343	5,449
1906.....	20,658	223	16,986	16,175	117	300	5,263
1905.....	28,500	199	16,159	15,725	86	252	4,431
1904.....	32,479	176	23,668	22,788	115	297	5,712
1903.....	24,080	158	20,801	20,050	157	301	5,512
1902.....	17,418	168	13,973	13,362	72	106	3,987
1901.....	20,851	242	12,574	12,342	55	158	2,942
1900.....	20,636	260	16,683	15,706	127	172	4,160
1899.....	21,621	178	12,723	12,607	49	162	2,938
1898.....	31,254	305	22,367	21,152	170	182	4,314
1897.....	16,226	105	6,538	6,699	49	62	982

Statement of sales of charts and Hydrographic Office publications and condemned property sold by the Navy Department during the fiscal year ended June 30, 1910.

Articles.	Sold to—	Gross amount received.	Expenses of sales.	Net proceeds.
Charts and Hydrographic Office publications.....	.....	\$6,184.04	.....	\$6,184.04
37,034 pounds waste paper.....	F. C. Butt & Co.....	107.40	.....	107.40
111,856 pounds waste paper.....	F. W. Schrupf Co.....	352.35	.....	352.35
20 typewriters.....	Underwood Typewriter Co.....	352.00	.....	352.00
1 old mimeograph.....	W. L. Swayze.....	7.50	.....	7.50
2 horses and 1 victoria.....	Sold at public auction.....	226.00	\$24.10	201.90
Condemned office furniture, carpets, etc.....	do.....	244.05	17.90	226.15
Total.....	.....	7,473.34	42.00	7,431.34

RECAPITULATION.

Gross proceeds.....	\$7,473.34
Expenses of sales.....	42.00
Net proceeds.....	7,431.34
Deposited to credit:	
Miscellaneous receipts, proceeds of sales.....	1,247.30
Contingent and miscellaneous expenses, Hydrographic Office, 1910.....	6,184.04
Total.....	7,431.34

COMPARATIVE STATEMENT OF ESTIMATES AND APPROPRIATIONS, 1911-12, NAVY DEPARTMENT.

Naval establishment.	Appropriated, 1911.	Estimates, 1912.	Increase of estimates for 1912 over amount appropriated for 1911 for same purpose.	Decrease of estimates for 1912 as compared with amount appropriated for 1911 for same purpose.	New items, 1912.
Pay of the navy.....	\$33,665,536.00	\$33,387,036.00	\$1,721,490.00		
Pay miscellaneous.....	898,550.00	1,000,000.00	131,450.00		
Contingent, navy.....	76,000.00	46,900.00		\$30,000.00	
NOTE.—In the event of the abolishment of the Bureau of Equipment, the following appropriation should be made under the "Office of the Secretary," immediately following the appropriation "Contingent, Navy:"					
Depots for coal.....	\$1,000,000.00				
Bureau of Navigation:					
Transportation.....	\$73,065.00	966,400.00	126,355.00		
Recruiting.....	130,000.00	130,000.00			
Contingent.....	13,000.00	15,000.00			
Gunnery exercises.....	130,000.00	107,000.00	37,000.00		
Steaming exercises.....	10,000.00	15,000.00	5,000.00		
Outfits on first enlistment.....	1,096,280.00	931,800.00		164,480.00	
Maintenance of naval auxiliaries.....	754,948.00	760,204.00	6,138.00		
Naval Training Station, California.....	70,167.65	70,167.65			
Naval Training Station, Rhode Island.....	83,183.28	83,183.28			
Naval Training Station, Great Lakes.....	106,599.36	106,599.36			
Naval War College, Rhode Island.....					
Maintenance.....	20,073.76	22,480.00	2,404.24		
Services of lecturer on international law.....	1,000.00	1,500.00	500.00		
Services of civilian lecturers.....	600.00	600.00			
Care and preservation of the library, including the purchase, binding, and repair of books of reference, and periodicals.....	800.00	1,500.00	700.00		
Total.....	3,292,849.05	3,398,436.29	178,097.24	164,480.00	
Net Increase.....			164,480.00		
			13,587.24		

NOTE.—At the instance of the Secretary of the Treasury the amount appropriated for the support of the Naval Home for the fiscal year 1911, and the amount estimated for that purpose for the fiscal year 1912, are not included in the totals of appropriations and estimates of the Navy Department. The appropriation for the Naval Home is paid from the interest on the navy pension fund, which is estimated for by the Treasury Department in the charter devoted to permanent annual appropriations. The amounts which will be required for the support of the Naval Home for the fiscal year ending June 30, 1912, as compared with the appropriation for 1911, are as follows:

Comparative statement of estimates and appropriations, 1911-12, Navy Department—Continued.

	Appropriated, 1911.	Estimates, 1912.	Increase of esti- mates for 1912 over amount appropriated for 1911 for same purpose.	Decrease of esti- mates for 1912 as compared with amount appropriated for 1911 for same purpose.	New Items, 1912.
Naval Home, Philadelphia, Pa.:					
For employes.....					
Secretary (submitted).....	\$15,250.00	\$18,808.00	\$1,690.00		\$1,600.00
Foreman mechanic (submitted).....			1,500.00		1,500.00
Chief laundress at \$216 (increase of \$24 submitted).....			24.00		
Five laundresses at \$192 each (increase of \$24 submitted).....			120.00		
Four scrubbers at \$192 each (increase of \$24 submitted).....			96.00		
Head waitress at \$216 (increase of \$24 submitted).....			24.00		
Eight waitresses at \$192 (increase of \$24 submitted).....			192.00		
Carpenter at \$846 (increase of \$1 submitted).....			1.00		
Miscellaneous.....	34,021.00	34,021.00			
Supplemental, Naval Home—	1,334.86			\$1,334.86	
Payments to beneficiaries and others.....					
Total.....	70,005.86	72,829.00	3,558.00	1,334.86	3,100.00
NOTE.—In the event of the abolishment of the Bureau of Equipment, the appropriation					
"Contingent, Navigation, 1912," should be increased to \$18,000, and the following appropria-					
tions made under this bureau:.....					
Instruments and supplies..... \$335,500.00					
Ocean and lake surveys..... 125,000.00					
Bureau of Ordnance:					
Ordnance and ordnance stores—					
Procuring, producing, preserving, and handling ordnance material.....					
Purchase and manufacture of smokeless powder.....					
Naval Gun Factory, Washington, D. C.—					
New and improved machinery.....					
Machinery, cupolas, furnaces, etc., for proposed new foundry.....					
New batteries for ships of the navy—					
New sights for 5-inch, 6-inch, and 7-inch guns, and modifying their mounts.....					
Lining and hooping to muzzle 8-inch Mark V guns.....					
Fire-control instruments for ships of the navy.....					
Fitting new breech mechanisms to 3-inch 50-caliber Mark III guns.....					
Modifying breech mechanisms of 3-inch, 4-inch, 5-inch, and 6-inch guns.....					
Replacing Mark VI 6-inch guns with Mark VIII guns and modernizing Mark VI guns.....					
Landing guns and appurtenances.....					
Ammunition for ships of the Navy.....					
	5,425,000.00	5,500,000.00	75,000.00		
	1,150,000.00	1,180,000.00			
	150,000.00	125,000.00		25,000.00	50,000.00
	245,000.00	245,000.00			
	60,000.00				
	100,000.00	100,000.00		60,000.00	
		100,000.00	100,000.00		100,000.00
		100,000.00	100,000.00		100,000.00
		200,000.00	200,000.00		200,000.00
		200,000.00	200,000.00		200,000.00
	2,500,000.00	2,850,000.00	350,000.00		

Modernizing turrets of ships of the Navy.....	564,000.00	420,000.00	170,000.00	564,000.00
Small arms and machine guns.....	250,000.00	650,000.00	600,000.00	600,000.00
Torpedoes and appliances.....	650,000.00	600,000.00		
Mines and mine appliances.....	100,000.00			
Advances-base outfit.....				
Torpedo station, Newport, R. I.: Labor and material, general care and maintenance.....	70,000.00	70,000.00		
New machinery and tools for torpedo factory.....	50,000.00			
High-pressure air plant.....	10,000.00			
Experiments.....	100,000.00			
Arming and equipping naval militia.....	125,000.00			
Repairs, ordnance.....	30,000.00			
Contingent ordnance.....	9,500.00			
Total.....	11,388,500.00	12,024,500.00	1,645,000.00	1,250,000.00
Net increase.....			869,000.00	
Bureau of Equipment: Equipment of vessels.....	3,843,300.00	3,843,300.00		
Coal and transportation.....	4,000,000.00	4,000,000.00		
Contingent, Bureau of Equipment.....	10,000.00	10,000.00		
Ocean and lake surveys.....	75,000.00	125,000.00	50,000.00	
Depots for coal.....	110,000.00	1,000,000.00	880,000.00	
Total.....	8,038,300.00	8,978,300.00	940,000.00	
Bureau of Yards and Docks: Maintenance, yards and docks.....	1,280,000.00	1,540,000.00	250,000.00	
Contingent, Bureau of Yards and Docks.....	30,000.00	30,000.00		
Total.....	1,320,000.00	1,570,000.00	250,000.00	
Public works, navy-yards and stations: Navy-yard, Boston, Mass.— Dredging.....	5,000.00	5,000.00		
Improvements to water front.....	65,000.00	50,000.00	15,000.00	
Improvements to yard buildings.....	15,000.00	10,000.00	5,000.00	
Railroad extension.....	10,000.00			
Paving and grading.....				
Paving.....	10,000.00	10,000.00		
Electrical system, extension.....	5,000.00	5,000.00		
One officer's quarters.....	12,000.00	12,000.00		
Improvement of central power plant.....	20,000.00	20,000.00		
Enlargement of dry dock No. 2.....	15,000.00	15,000.00		
Toward floating crane.....	150,000.00	150,000.00		
Total.....	105,000.00	277,000.00	212,000.00	40,000.00
Total.....	105,000.00	277,000.00	212,000.00	40,000.00

Comparative statement of estimates and appropriations, 1911-12, Navy Department—Continued.

	Appropriated, 1911.	Estimates, 1912.	Increase of esti- mates for 1912 over amount appropriated for 1911 for same purpose.	Decrease of esti- mates for 1912 compared with amount appropriated for 1911 for same purpose.	New items, 1912.
Naval establishment.					
Public works, navy-yards and stations—Continued.					
Navy-yard, Charleston, S. C.—					
Dredging, to continue.....		\$30,000.00	\$30,000.00		\$30,000.00
Paving and grading, to continue.....		5,000.00	5,000.00		5,000.00
Railroad system, extensions and improvements.....		5,000.00	5,000.00		5,000.00
Total.....		40,000.00	40,000.00		40,000.00
Naval station, Island of Guam—					
Sewer system.....		15,000.00	15,000.00		15,000.00
Extension of naval station roads.....		10,000.00	10,000.00		10,000.00
Coal shed, Piti.....		1,000.00	1,000.00		1,000.00
Wharf, Piti.....		3,000.00	3,000.00		3,000.00
Ice plant.....		3,000.00	3,000.00		3,000.00
Total.....		32,000.00	32,000.00		32,000.00
Naval station, Key West, Fla.—					
Approach to Pier B.....		10,000.00	10,000.00		10,000.00
Repairs coal shed and coal conveyors A.....		23,000.00	23,000.00		23,000.00
Water system.....		2,000.00	2,000.00		2,000.00
Machinery houses, marine railway.....		5,000.00	5,000.00		5,000.00
Repairs and foundations, shed B.....		2,000.00	2,000.00		2,000.00
Repairs and foundations, shed B.....		6,000.00	6,000.00		6,000.00
Total.....		48,000.00	48,000.00		48,000.00
Navy-yard, Mare Island, Cal.—					
To continue improvement of channel.....	\$100,000.00			\$100,000.00	
For purchase of a shed belonging to the dry-dock contractors.....	2,000.00			2,000.00	
Grading and paving.....		15,000.00	15,000.00		15,000.00
Railway system, extensions.....		10,000.00	10,000.00		10,000.00
Water system, extensions.....		5,000.00	5,000.00		5,000.00
Electric plant, extensions.....		5,000.00	5,000.00		5,000.00
Pneumatic system, extensions.....		5,000.00	5,000.00		5,000.00
Water-closets and lavatories.....		12,000.00	12,000.00		12,000.00
Purchase of residence on navy-yard now the property of Mrs. L. L. Menefee.....		3,850.00	3,850.00		3,850.00
Improvement of quarters '11'.....		5,000.00	5,000.00		5,000.00
Total.....	102,000.00	60,850.00	60,850.00	102,000.00	60,850.00

	64,077.71	64,077.71	64,077.71	64,077.71
Naval station, New Orleans, La.— For power house and plant.....				
Navy-yard, New York, N. Y.— Dry dock No. 4, to complete..... Bolards and capstans for dry dock No. 4..... Crane track and extension of railroad track around dry dock No. 4..... Supply pipes around dry dock No. 4..... Paving around dry dock No. 4..... Condenser system..... Distributing systems, extensions..... Water-front improvements, to continue..... To complete cement shed..... Repairs to buildings, gutters, leaders, roofs, etc..... Paving and grading..... Railroad equipment, extensions..... Yard dispensary, extension.....	500,000.00 1,100,000.00 42,500.00 43,000.00 15,000.00 24,000.00 45,000.00 50,000.00 100,000.00 215,000.00 1,000.00 20,000.00 20,000.00 5,000.00 4,500.00	600,000.00 42,500.00 43,000.00 15,000.00 24,000.00 45,000.00 50,000.00 20,000.00 20,000.00 5,000.00 4,500.00	115,000.00 1,000.00	42,500.00 43,000.00 15,000.00 24,000.00 45,000.00 50,000.00 20,000.00 20,000.00 5,000.00 4,500.00
Total.....	716,000.00	899,000.00	116,000.00	269,000.00
Navy-yard, Norfolk, Va.— Railroad tracks, extensions..... Electric-light plant, extensions..... Repairs, buildings, St. Helena..... Dredging, to continue..... Compressed air system, extensions..... Improvements Dry Dock No. 1..... To enlarge Dry Dock No. 3..... Crane track around Dry Dock No. 3, to continue..... Paving and grading..... Power plant, coal storage..... Electric motors for pumping plants, dry docks 1 and 2..... Water closets and lavatories in yard shops..... Heating system, extension..... Purchase of land..... Electric plant, extensions..... Sewer system, extensions..... Water closets and lavatories for Dry Dock No. 3..... Garbage crematory..... Fire protection system, extensions..... Renovals and additions to 120-ton floating derrick..... Renewal of Richmond's dock..... Water system, extension..... Natalorium, St. Helena.....	10,000.00 25,000.00 25,000.00 25,000.00 15,000.00 100,000.00 550,000.00 200,000.00 30,000.00 25,000.00 25,000.00 15,000.00 80,000.00 25,000.00 6,000.00 15,000.00 10,000.00 5,000.00 5,000.00 12,000.00 5,000.00 4,500.00	5,000.00 25,000.00 25,000.00 3,000.00 3,000.00 100,000.00 550,000.00 200,000.00 30,000.00 25,000.00 35,000.00 25,000.00 80,000.00 25,000.00 6,000.00 15,000.00 10,000.00 5,000.00 5,000.00 12,000.00 5,000.00 4,500.00	5,000.00 25,000.00 5,000.00 5,000.00 550,000.00 200,000.00 30,000.00 25,000.00 35,000.00 25,000.00	80,000.00 25,000.00 6,000.00 15,000.00 10,000.00 5,000.00 5,000.00 12,000.00 5,000.00 4,500.00
Total.....	895,000.00	1,075,500.00	715,000.00	1,075,500.00

NOTE.—It is requested that the following provision be enacted:
"The sum of twenty thousand dollars appropriated by the act of June 24, 1910, for crane track around Dry Dock No. 3, is hereby reappropriated and made available for renewal of locomotive crane tracks."

Comparative statement of estimates and appropriations, 1911-12, Navy Department—Continued.

	Appropriated, 1911.	Estimates, 1912.	Increase of esti- mates for 1912 over amount appropriated for 1911 for same purpose.	Decrease of esti- mates for 1912 compared with amount appropriated for 1911 for same purpose.	New items, 1912.
Naval establishment.		\$800,000.00	\$300,000.00		\$300,000.00
Public works, navy-yards and stations—Continued.					
Naval station, Olongapo, P. I.	\$1,500,000.00	545,000.00		\$955,000.00	
Toward station development.	1,000,000.00	800,000.00		200,000.00	
Naval station, Pearl Harbor, Hawaii—					
Dredging.		50,000.00	50,000.00		50,000.00
Dry-dock (limit of cost is hereby increased to \$2,750,000) to continue.		250,000.00	250,000.00		250,000.00
Administration building.		69,000.00	69,000.00		69,000.00
Power plant.		23,000.00	23,000.00		23,000.00
Six officers' quarters.		75,000.00	75,000.00		75,000.00
Fresh-water system.		50,000.00	50,000.00		50,000.00
Foundry.		60,000.00	60,000.00		60,000.00
Forge shop.		50,000.00	50,000.00		50,000.00
Combined shipfitting and sheet metal shop.		50,000.00	50,000.00		50,000.00
Combined copper pipe and plumber shop.		70,000.00	70,000.00		70,000.00
Combined wood-working shop.		100,000.00	100,000.00		100,000.00
Boiler shop.		75,000.00	75,000.00		75,000.00
Water-front development.					
Toward the establishment of a naval hospital.					
Total.	2,500,000.00	2,287,000.00	942,000.00	1,155,000.00	942,000.00
Navy-yard, Pensacola, Fla.—					
For elevator for building No. 1, to complete.	2,000.00			2,000.00	
Navy-yard, Philadelphia, Pa.—					
Dredging, to complete.	215,000.00	75,000.00	75,000.00	215,000.00	75,000.00
Rebuilding pier No. 5.		10,000.00	10,000.00		10,000.00
Harb' water-towers.		20,000.00	20,000.00		20,000.00
Pump motors for dry dock No. 1.		20,000.00	20,000.00		20,000.00
Reserve basin, extension.		25,000.00	25,000.00		25,000.00
Mats for 100-ton shears.		2,000.00	2,000.00		2,000.00
Refill track and equipment.		5,000.00	5,000.00		5,000.00
Sanitation system, reserve basin (to cost not to exceed \$75,000).		30,000.00	30,000.00		30,000.00
Total.	215,000.00	227,000.00	227,000.00	215,000.00	227,000.00

Navy-yard, Portsmouth, N. H.—									
Quay wall, to continue.....	48,200.00								48,200.00
To repair the old highway bridge connecting the navy-yard with the mainland.....	7,000.00								7,000.00
Combined railway and highway bridge, with approach and appurtenances.....	125,000.00				125,000.00				125,000.00
Railroad rolling stock, additional.....	4,000.00				4,000.00				4,000.00
Total.....	55,200.00				129,000.00				179,000.00
Navy-yard, Puget Sound, Wash.—									
Dry dock (limit of cost increased to \$2,300,000) to complete.....	600,000.00				300,000.00				1,000,000.00
Storehouse, to complete.....	100,000.00								100,000.00
Foundry, to complete.....	125,000.00								125,000.00
Pier 6, renewals and improvements.....	25,000.00				25,000.00				25,000.00
Welding system, renewals and extensions.....	10,000.00				10,000.00				10,000.00
Water-closets for yard workmen.....	12,000.00				12,000.00				12,000.00
Paving, to commence.....	10,000.00				10,000.00				10,000.00
Garage incinerator.....	5,000.00				5,000.00				5,000.00
Railroad equipment and extensions.....	5,000.00				5,000.00				5,000.00
Flushing system, extensions.....	10,000.00				10,000.00				10,000.00
Flotation system, extensions.....	5,000.00				5,000.00				5,000.00
Dredging.....	5,000.00				5,000.00				5,000.00
Walk on Burwell avenue.....	1,000.00				1,000.00				1,000.00
Total.....	885,000.00				989,000.00				89,000.00
Navy-yard, Washington, D. C.—									
Dredging.....	10,000.00				5,000.00				5,000.00
Purchase of land and construction of tracks.....	136,000.00								136,000.00
New foundry and equipment (to cost \$500,000).....	100,000.00				100,000.00				100,000.00
New floors for shops.....	25,000.00				25,000.00				25,000.00
Railroad tracks, extension.....	2,000.00				2,000.00				2,000.00
Paving, to continue.....	2,500.00				2,500.00				2,500.00
Total.....	146,000.00				129,500.00				129,500.00
For repairs and preservation at navy-yards and stations.....	700,000.00				100,000.00				
Total.....	125,000.00				125,000.00				125,000.00
NOTE.—In the event of the abolition of the Bureau of Equipment the estimate submitted under this appropriation should be increased by the sum of \$100,000 taken from appropriations, "Coal and Transportation, 1912," to cover repairs to coaling depots and coaling plants at navy-yards and stations, making the total estimate \$300,000.									
Floating crane: One 100-ton floating crane (to cost not exceeding \$250,000) for use at Pearl Harbor, Hawaii.....									
RECAPITULATION.									
Navy-yard, Boston, Mass.....	105,000.00				277,000.00				212,000.00
Navy-yard, Charleston, S. C.....					40,000.00				40,000.00
Naval station, Island of Guam.....					32,000.00				32,000.00
Naval station, Key West, Fla.....					48,000.00				48,000.00
Navy-yard, Mare Island, Cal.....	102,000.00				60,850.00				102,000.00
Total.....	105,000.00				477,000.00				490,850.00

Comparative statement of estimates and appropriations, 1911-12, Navy Department—Continued.

Naval establishment.	Appropriated. 1911.	Estimates, 1912.	Increase of estimates for 1912 over amount appropriated for 1911 for same purpose.	Decrease of estimates for 1912 as compared with amount appropriated for 1911 for same purpose.	New Items, 1912.
RECAPITULATION—continued.					
Public works, navy-yards and stations—Continued.					
Naval station, New Orleans, La.....	\$64,677.71		\$69,000.00	\$64,677.71	\$299,000.00
Navy-yard, New York, N. Y.....	716,000.00	\$1,469,000.00	\$899,000.00	116,000.00	167,500.00
Navy-yard, Norfolk, Va.....	895,000.00	347,500.00	167,500.00	715,000.00	300,000.00
Naval station, Olompo, P. I.....		300,000.00	300,000.00		942,000.00
Naval station, Pearl Harbor, Hawaiian Islands.....	2,500,000.00	2,287,000.00	942,000.00	1,155,000.00	2,000.00
Navy-yard, Pensacola, Fla.....	2,000.00			2,000.00	227,000.00
Navy-yard, Philadelphia, Pa.....	215,000.00	227,000.00	227,000.00	215,000.00	129,000.00
Navy-yard, Portsmouth, N. H.....	55,250.00	129,000.00	129,000.00	55,250.00	89,000.00
Navy-yard, Puget Sound, Wash.....	889,000.00	989,000.00	389,000.00	285,000.00	129,500.00
Navy-yard, Washington, D. C.....	146,000.00	134,500.00	129,500.00	141,000.00	
Repairs and preservation at navy-yards and stations.....	700,000.00	800,000.00	100,000.00		
Floating crane: One 100-ton floating crane (to cost not exceeding \$250,000) for use at Pearl Harbor, Hawaiian Islands.....	125,000.00			125,000.00	
Total, public works, navy yards and stations.....	6,510,927.71	7,140,850.00	3,645,850.00	3,015,927.71	2,645,650.00
Net increase.....			639,922.29		
Public works under the Secretary of the Navy:					
Buildings and grounds, Naval Academy—					
One wooden pier with crosswood piles.....	40,000.00			40,000.00	
Transfer of power plant, etc.....	108,500.00			108,500.00	
New drawbridge across Dorsey Creek.....		25,000.00	25,000.00		25,000.00
Underground conduit system.....		50,000.00	50,000.00		50,000.00
Navy Station, Island of Oahu.....					
Maintenance and care of repeaters and other special patients.....	14,000.00	14,000.00			
For purchase of land in vicinity of naval trial course, Moron Island, Penobscot Bay, Maine.....	3,600.00			3,600.00	
Purchase of land for range lights, naval station, Tutuila, Samoa.....		300.00	300.00		
Total.....	165,600.00	89,300.00	75,300.00	151,600.00	75,300.00
Public works, Bureau of Navigation:					
Naval training station, California—					
Garbage crematory.....		1,500.00	1,500.00		1,500.00
House for transfer of tugs.....		2,600.00	2,600.00		2,600.00

Naval training station, Rhode Island—								30,000.00
Reseals and repairs to administration building.....								18,000.00
Additional water supply.....								7,500.00
Extension and renewal of water, steam, sewer, and C ₀ pipes and heating conduit.....								2,000.00
Repairs to barracks C, to continue.....								3,500.00
Additional roads, walks, and pavements in the vicinity of barracks C.....								5,000.00
For moving bathhouse.....								9,300.00
Repairs to barracks B.....								14,300.00
Underground conduit system, to continue.....								55,100.00
Total.....	16,300.00	57,100.00	20,000.00	20,000.00	14,300.00			55,100.00
Norx.—In the event of the abolishment of the Bureau of Equipment, the following appropriation should be made under this bureau:								
Naval Observatory, grounds and roads.....								\$10,000.00
Public works, Bureau of Ordnance:								
Naval proving ground, Indian Head, Md.—								
One additional emplacement for new Mark 12-inch or 14-inch guns.....	10,000.00							14,500.00
Turntable, traverse table, and track, north battery.....								10,000.00
Rebuilding river wharf.....								
Naval magazine, Fort Mifflin, Pa.—	8,500.00							8,500.00
Electric connection to navy yard, etc.....								6,000.00
Building for reforming plant.....								12,000.00
Installation of electric power, lighting, and telephone system.....								
Naval magazine, Mare Island, Cal.—	8,000.00							8,000.00
Salt water system for fire protection.....	600.00							600.00
Lighting rods for buildings.....								3,000.00
One magazine in tenant's quarters.....								15,000.00
One shell house.....								
Naval magazine, Puget Sound, Wash.—								
One magazine building.....	7,000.00							7,000.00
One filling house.....	1,000.00							1,100.00
One small arms ammunition house.....	7,000.00							7,000.00
One structure for kmen.....	3,500.00							500.00
Fire structure for kmen.....								3,000.00
Sewerage system.....	3,000.00							3,000.00
Office building and laboratory.....	3,000.00							3,000.00
One magazine.....								9,000.00
One fixed ammunition storehouse.....								15,000.00
Naval Torpedo Station, Newport, R. I.—								15,000.00
One general storehouse.....	50,000.00							50,000.00
Three latrines.....	2,100.00							2,100.00
Electric conduits for lighting, telephone and watchmen's clock systems, and cables to Rose Island and Newport.....								5,000.00
Garbage crematory.....								3,000.00
Fire station for hook and ladder and hose reels.....								2,000.00
Stable for horses, wagons, trucks, and yard-locomotive trams.....								5,000.00
Water-supply pipe across harbor.....								6,000.00
New power house, toward building and equipping.....								60,000.00
Extension of fire mains.....								6,200.00
Taving, additional.....								5,000.00

Comparative statement of estimates and appropriations, 1911-12, Navy Department—Continued.

	Appropriated, 1911.	Estimates, 1912.	Increase of esti- mates for 1912 over amount appropriated for 1911 for same purpose.	Decrease of esti- mates for 1912 as compared with amount appropriated for 1911 for same purpose.	New items, 1912.
Naval establishment.					
Public works, Bureau of Ordnance—Continued.					
Pacific coast torpedo station.....	\$145,000.00	\$25,000.00		\$120,000.00	
Naval magazine, St. Juliens Creek, Va.— Bulkheads and filling of lowland.....		2,000.00	\$2,000.00		\$2,000.00
One magazine building.....		15,000.00	15,000.00		15,000.00
One shell house.....		20,000.00	20,000.00		20,000.00
Acquiring fresh-water supply and additional fire protection.....		10,000.00	10,000.00		10,000.00
Naval magazine, New York Harbor (Iona Island)— Extension of sea (river) wall.....		5,000.00	5,000.00		5,000.00
One shell house.....		25,000.00	25,000.00		25,000.00
Naval magazine, Laksø Denmark, N. J.— One magazine.....		15,000.00	15,000.00		15,000.00
Naval magazine, Fort Lafayette, N. Y.— Additional floors in ammunition house, shell house, and filling house, and extension of balcony on same.....		5,300.00	5,300.00		5,300.00
Naval station, Guantanamo, Cuba— One magazine.....		15,000.00	15,000.00		15,000.00
One shell house.....		3,000.00	3,000.00		3,000.00
One set quarters and office.....		13,000.00	13,000.00		13,000.00
Water closets, plumbing, grading, and equipment.....		8,300.00	8,300.00		8,300.00
Naval magazine, Philadelphia, Pa.— One storehouse, one magazine, and one fuse house.....	8,800.00			8,800.00	
One shell house, one observation magazine, one storeroom shed, one marine barracks, exten- sions to run-coitan house, railway track and dock, one electric generator, and for lighting grounds and quarters.....					
Total.....	259,000.00	380,577.00	355,577.00	234,600.00	355,577.00
Net increase.....			120,977.00		
Public works under Bureau of Equipment:					
Naval Observatory—Grounds and roads, etc.....	10,000.00	10,000.00			
NOTE.—In the event of the abolishment of the Bureau of Equipment, this appropriation should be provided for under "Public works, Bureau of Navigation."					

Public works, Bureau of Medicine and Surgery:	150,000.00			150,000.00	
Naval hospital, Great Lakes.....					
Public works, Marine Corps:					
Boston, Mass., barracks, grounds, etc.....	100,000.00	100,000.00		100,000.00	
Boston, Mass., officers' quarters.....	48,000.00	48,000.00		48,000.00	
Philadelphia, Pa., marine garrison.....	250,000.00	250,000.00		250,000.00	
Philadelphia, Pa., officers' quarters (4).....	40,000.00	40,000.00		40,000.00	
Philadelphia, Pa., officers' quarters.....	70,000.00			70,000.00	
Winthrop, Md., improvements to quarters, buildings, etc.....	20,000.00	20,000.00		20,000.00	
Norfolk, Va., officers' quarters.....	47,500.00			47,500.00	
Total.....	117,500.00	488,000.00	117,500.00	117,500.00	488,000.00
Net increase.....		340,500.00			
Bureau of Medicine and Surgery:					
Medical department.....	315,000.00	350,000.00		35,000.00	
Contingent, Bureau of Medicine and Surgery.....	76,500.00	79,000.00		2,500.00	
Transportation of remainls.....	10,000.00	13,000.00		3,000.00	
Total.....	401,500.00	442,000.00	40,500.00	40,500.00	
Bureau of Supplies and Accounts:					
Provisions, navy.....	7,471,070.97	7,630,000.00		158,929.03	
Contingent, Bureau of Supplies and Accounts.....	159,000.00	159,000.00			
Freight, Bureau of Supplies and Accounts.....	535,000.00	535,000.00			
Total.....	8,165,070.97	8,324,000.00	158,929.03	158,929.03	
Note.—In the event of the abolishment of the Bureau of Equipment, the appropriation "Contingent, Supplies and Accounts, 1912," should be increased to \$239,000, and the following appropriations made under this Bureau:					
Coal and transportation.....					\$3,558,000
Equipment, Supplies and Accounts.....					215,000
Bureau of Construction and Repair:					
Construction and repair of vessels.....	8,979,144.00	8,979,144.00			
Improvement of construction plant—					
Navy-yard, Portsmouth, N. H.....	15,000.00	15,000.00		15,000.00	
Navy-yard, Boston, Mass.....	20,000.00	20,000.00		20,000.00	
Navy-yard, New York, N. Y.....	20,000.00	20,000.00		20,000.00	
Navy-yard, Philadelphia, Pa.....	15,000.00	15,000.00		15,000.00	
Navy-yard, Norfolk, Va.....	12,000.00	12,000.00		12,000.00	
Navy-yard, Charleston, S. C.....	20,000.00	20,000.00		20,000.00	
Navy-yard, Mare Island, Cal.....	15,000.00	15,000.00		15,000.00	
Navy-yard, Puget Sound, Wash.....	15,000.00			15,000.00	
Total.....	9,111,144.00	9,096,144.00		15,000.00	
Note.—In the event of the abolishment of the Bureau of Equipment, the appropriation "Construction and repair, 1912," should be increased to \$10,189,644.					

Comparative statement of estimates and appropriations, 1911-12, Navy Department—Continued.

	Appropriated, 1911.	Estimates, 1912.	Increase of esti- mates for 1912 over amount appropriated for 1911 for same purpose.	Decrease of esti- mates for 1912 as compared with amount appropriated for 1911 for same purpose.	New items, 1912.
Naval establishment.					
Bureau of Steam Engineering:					
Steam machinery.....	\$6,256,000.00	\$6,256,000.00			
Engineering experiment station—					
Experimental and research work.....	20,000.00	40,000.00	\$20,000.00		
Equipment of building.....		42,000.00	42,000.00		\$42,000.00
Dredging.....	5,000.00			\$5,000.00	
Equipment.....	59,713.92			59,713.92	
Completion of boiler house.....		50,000.00	50,000.00		50,000.00
Six cottages for firemen.....		6,000.00	6,000.00		6,000.00
Machinery plant.....					
Navy-yard, Portsmouth, N. H.....		25,000.00	25,000.00		25,000.00
Navy-yard, New York, N. Y.....		30,000.00	30,000.00		30,000.00
Navy-yard, Norfolk, Va.....		30,000.00	30,000.00		30,000.00
Navy-yard, Mare Island, Cal.....		25,000.00	25,000.00		25,000.00
Total.....	6,340,713.92	6,494,000.00	218,000.00	64,713.92	198,000.00
NOTE.—In the event of the abolishment of the Bureau of Equipment, the appropriation					
"Steam machinery, 1912," should be increased to \$8,616,300.00.					
United States Naval Academy:					
Pay of professors and others, Naval Academy.....	186,704.00	187,404.00	100.00		
One swordmaster at \$1,600 (increase of \$100 submitted).....			100.00		
One cataloguer at \$1,200 (increase of \$100 submitted).....			100.00		
One secretary of the Naval Academy at \$2,000 (increase of \$300 submitted).....			200.00		
One clerk at \$1,500 (increase of \$60 submitted).....			60.00		
Two writers at \$30 each (increase of \$120 each submitted).....			240.00		
Current and miscellaneous expenses, Naval Academy.....	44,500.00	45,500.00	1,000.00		
Expenses of Board of Visitors.....		212,964.00	214,116.00		
Maintenance.....					
Rent of buildings, etc.....			1,152.00		
Repairs, Naval Academy.....		125,000.00	60,000.00		
Memorials, Naval Academy.....		3,000.00	3,000.00		
Total.....	599,168.00	575,020.00	65,852.00		3,000.00

Marine Corps:					
Pay of the Marine Corps—					
Officers, active list.....	911,263.00	922,773.00	11,510.00		
Officers, retired list.....	38,800.00	42,000.00	3,200.00		
Noncommissioned officers, musicians, privates, active list.....	791,336.00	2,739,622.00			6,547.00
Retired men, active list.....	94,336.00	139,045.00			
Unissued clothing.....	128,135.22	185,790.00	57,654.78		
Miscellaneous.....	55,000.00	55,000.00			
Commutation of quarters.....	33,500.00	33,500.00			
Pay, civil fines.....					
Office of major-general, commandant.....	3,771.28	4,371.28	600.00		
Office of the paymaster.....	11,300.00	4,500.00	200.00		7,000.00
Office of the adjutant and inspector.....	4,300.00	4,500.00	200.00		
Quartermaster's department.....	16,540.00	16,940.00	400.00		
Total.....	4,176,134.50	4,281,001.28	118,413.78		13,647.00
			13,547.00		
			104,866.78		
Net increase.....					
Quartermaster's Department, Marine Corps—					
Provisional, Marine Corps.....	723,543.00	820,000.00			
Clothing, Marine Corps.....	725,920.00	725,920.00	96,457.00		
Fuel, Marine Corps.....	137,000.00	157,000.00			
Military stores, Marine Corps.....	297,737.00	297,737.00	20,000.00		
Military stores, Marine Corps, rifles.....	50,000.00	150,000.00			
Transportation and recruiting, Marine Corps.....	282,000.00	282,000.00	100,000.00		
Repairs of barracks, Marine Corps.....	110,000.00	110,000.00			
Forage, Marine Corps.....	24,200.00	24,200.00			
Commutation of quarters, Marine Corps.....	80,500.00	80,500.00			
Contingent, Marine Corps.....	420,000.00	445,000.00	25,000.00		
Total.....	2,850,900.00	3,092,357.00	241,457.00		
Increase of the navy (exclusive of first year of new building program):					
Construction and machinery.....	12,175,563.00	6,031,785.79			6,143,967.21
Torpedo boats.....	829,971.00	890,523.88	30,832.88		
Collars.....	300,000.00	453,000.00	231,000.00		
Armor and armament.....	4,000,000.00	3,000,000.00			1,000,000.00
Equipment.....	100,000.00				100,000.00
Total.....	17,405,734.00	10,453,619.67	261,862.88		7,243,967.21
Increase of the navy (first year of proposed building program):					
Construction and machinery.....	7,225,000.00	6,430,000.00			785,000.00
Torpedo boats.....	1,246,000.00				1,246,000.00
Armor and armament.....	7,565,122.00	6,779,928.00			785,194.00
Equipment.....	299,500.00				299,500.00
Total.....	16,335,622.00	13,209,928.00			3,124,694.00

* In order to construct a "collier" * * * on the Pacific coast in such government yard as the Secretary of the Navy shall direct, it will be necessary for Congress to increase the limit of cost on this collier from \$1,000,000, as provided in the act of June 24, 1910, to \$1,500,000, and to appropriate the sum of \$531,000 as estimated above.

Comparative statement of estimates and appropriations, 1911-12, Navy Department—Continued.

RECAPITULATION.

	Estimates, 1911.	Appropriated, 1911.	Approved esti- mates, 1912.	Increase of estimates for 1912 over amount ap- propriated for 1911 for same pur- pose.	Decrease of estimates for 1912 as com- pared with amount ap- propriated for 1911 for same pur- pose.	Original esti- mates sub- mitted to de- partment, 1912.	Decrease by department.
Naval establishment.							
Pay of the navy.....	\$34,094,536.00	\$33,665,536.00	\$35,387,026.00	\$1,721,490.00		\$35,387,026.00	
Pay miscellaneous.....	868,550.00	868,550.00	1,000,000.00	131,450.00		1,000,000.00	
Relief of G. M. Baker.....	1,500.00						
Contingent, navy.....	76,000.00	76,000.00	46,000.00		\$30,000.00	46,000.00	
Bureau of Navigation.....	3,357,849.05	3,292,849.05	3,306,436.29	13,587.24		3,346,456.29	\$44,014.00
Bureau of Ordnance.....	11,708,500.00	11,588,500.00	12,624,500.00	1,036,000.00		13,280,550.00	659,050.00
Bureau of Equipment.....	8,038,300.00	8,038,300.00	8,978,300.00	940,000.00		10,026,140.00	1,047,840.00
Bureau of Yards and Docks.....	1,530,000.00	1,350,000.00	1,570,000.00	250,000.00		1,570,000.00	
Public works, Bureau of Yards and Docks.....	6,594,250.00	6,510,927.71	7,140,830.00	629,922.29		25,292,468.37	18,151,036.37
Public works, Secretary's office: Buildings and grounds, Naval Academy.....	40,000.00	148,200.00	75,000.00		73,200.00	1,180,000.00	1,075,000.00
Naval station, Island of Guam: Maintenance of lepers and other special patients.....	14,000.00	14,000.00	14,000.00			14,000.00	
Purchase of land, Penobscot Bay, Me.....	3,400.00	3,400.00	300.00	300.00			
Public works, Bureau of Navigation: Purchase of land for range lights, naval station, Tutuila, Samoa.....			300.00	300.00		300.00	
Public works, Bureau of Navigation: Naval training station, Eberle Island.....	16,300.00	16,300.00	4,100.00	4,100.00		65,763.00	61,663.00
Naval Training Station, Great Lakes.....	20,000.00		53,000.00	36,700.00		102,500.00	49,500.00
Naval Training Station, Great Lakes.....	296,600.00	259,600.00	380,577.00	120,977.00		590,077.00	209,500.00
Public Works, Bureau of Ordnance.....	10,000.00	10,000.00	10,000.00			194,404.00	184,404.00
Public Works, Bureau of Equipment.....	130,000.00	150,000.00			150,000.00		
Public Works, Marine Corps.....	392,000.00	177,500.00	458,000.00	340,500.00		1,212,000.00	754,000.00
Bureau of Medicine and Surgery.....	401,650.00	401,500.00	442,000.00	40,500.00		442,000.00	
Bureau of Supplies and Accounts.....	8,165,070.97	8,165,070.97	8,324,000.00	158,929.03		8,378,506.88	54,506.88
Bureau of Construction and Repair.....	9,111,144.00	9,111,144.00	9,096,144.00		15,000.00	9,096,144.00	
Bureau of Steam Engineering.....	6,286,000.00	6,340,713.92	6,494,000.00	153,286.08		6,494,000.00	
Naval Academy.....	719,000.00	509,168.00	575,020.00	65,852.00		596,040.00	21,020.00
Marine Corps: Paymaster.....	4,176,134.50	4,176,134.50	4,281,001.28	104,866.78		4,299,041.28	18,040.00
Quartermaster.....	2,850,900.00	2,850,900.00	3,092,357.00	241,457.00		3,146,213.00	53,856.00

Increase of the navy (exclusive of new building program):									
Construction and machinery.....	12,175,753.00	12,175,753.00	6,031,785.79	.....	6,143,967.21	6,031,785.79	.....	
Torpedo boats.....	859,971.00	859,971.00	890,833.88	30,862.88	.....	890,833.88	.....	
Collars.....	800,000.00	800,000.00	531,000.00	231,000.00	.....	531,000.00	.....	
Armor and armament.....	4,000,000.00	4,000,000.00	3,000,000.00	.....	1,000,000.00	3,000,000.00	.....	
Equipment.....	100,000.00	100,000.00	.....	.....	100,000.00	.....	.....
Total (exclusive of new building program).....	116,177,408.52	115,070,018.15	113,806,231.24	6,251,780.30	7,515,567.21	136,186,201.49	22,380,030.25		
Increase of the navy (first year of proposed building program):									
Construction and machinery.....	4,900,000.00	7,225,000.00	6,430,000.00	.....	765,000.00	6,430,000.00	.....	
Torpedo boats.....	.....	1,245,000.00	.....	.....	1,245,000.00	.....	.....
Armor and armament.....	7,594,622.00	7,565,122.00	6,779,928.00	.....	785,194.00	6,779,928.00	.....	
Equipment.....	349,500.00	299,500.00	.....	.....	299,500.00	.....	.....
Grand total.....	129,021,530.52	131,404,640.15	127,016,159.24	6,251,780.30	10,640,261.21	149,396,189.49	22,380,030.25		
Net decrease.....					4,388,480.91				

Comparative statement of estimates and appropriations, 1911-12, Navy Department—Continued.

	Appropriated, 1911.	Estimates, 1912.	Increase of esti- mates for 1912 over amount appropriated for 1911 for same purpose.	Decrease of esti- mates for 1912 as compared with amount appropriated for 1911 for same purpose.	New Items, 1912.
Office of the Secretary:					
Salaries.....					
Chief division of correspondence (new), in lieu of one clerk class 4.....	\$73,400.00	\$74,400.00	\$200.00		
Appointment clerk (new), in lieu of one clerk class 4.....			200.00		
Clerk of class 3 (new), in lieu of one clerk class 2.....			200.00		
Clerk of class 2 (new), in lieu of one clerk class 1.....			200.00		
Clerk of class 1 (new), in lieu of one clerk at \$1,100.....			100.00		
Telegraph operator at \$1,300; (increase of \$100 submitted).....			100.00		
Total.....	73,400.00	74,400.00	1,000.00		
Office of the Solicitor—Salaries.....					
Library of the Navy Department—Salaries.....	16,900.00	16,900.00			
Office of Naval Records of the Rebellion— Salaries.....	3,980.00	3,980.00			
Necessary traveling expenses for collection of records.....	17,240.00	17,240.00			
Publication of Naval Records of the Rebellion.....	100.00	100.00			
Total.....	21,600.00	21,600.00			
Office of Judge-Advocate-General, United States Navy—					
Salaries.....	38,340.00	38,340.00			
Chief clerk and law clerk, submitted.....	10,130.00	12,370.00			
Total.....	10,130.00	12,370.00			
Bureau of Navigation:					
Salaries.....	78,900.00	84,000.00			
One chief clerk (increase of \$500 submitted).....			500.00		
Two chiefs of division (in lieu of two copyists at \$840 each omitted).....			2,320.00		
Four clerks of class 1 (in lieu of three clerks at \$1,100 each, and one copyist at \$840 omitted).....			650.00		
Nine copyists at \$900 each (two new submitted, and seven in lieu of seven copyists at \$840 each omitted).....			2,220.00		
Total.....	78,900.00	84,000.00	5,700.00		
					\$2,250.00
					2,250.00

Office of Naval Intelligence:	12,100.00	12,700.00	660.00	660.00
Salaries.....				
Laborer.....				
Total.....	12,100.00	12,700.00	660.00	660.00
Bureau of Equipment:	32,900.00	33,400.00	500.00	500.00
Salaries.....				
One chief clerk (increase of \$500 submitted).....				
Total.....	32,900.00	33,400.00	500.00	500.00

	Rating.	Per diem.	Per annum.	Total.
1 electrical expert and draftsman.....		\$5.48	\$2,038.24	\$2,038.24
1 electrical draftsman, third class.....		4.48	1,402.24	1,402.24
1 electrical draftsman.....		4.24	1,327.12	1,327.12
2 assistant electrical draftsmen, third class.....		3.52	1,101.76	2,203.52
1 copyist, electrical draftsman, third class.....		2.80	876.40	876.40
1 minor under instruction.....		2.56	801.28	801.28
1 minor under instruction.....		1.04	325.52	325.52
Total.....				8,964.32
Hydrographic Office—				
Salaries.....				
Nautical expert at \$1,400 (in lieu of nautical expert at \$1,200)				100.00
Nautical expert at \$1,200 (in lieu of nautical expert at \$1,000)				200.00
Two clerks at \$1,000 each (in lieu of 2 copyists at \$800 each)				200.00
Copyist at \$90 (in lieu of copyist at \$80)				60.00
Two copyists at \$80 each (in lieu of 2 copyists at \$70 each)				240.00
Draftsman at \$1,400 (in lieu of draftsman at \$1,200)				200.00
Draftsman at \$1,200 (in lieu of draftsman at \$1,000)				200.00
Draftsman at \$1,000 (in lieu of draftsman at \$900)				100.00
Three chart correctors at \$50 each (in lieu of 3 apprentice draftsmen at \$100 each)				600.00
Engraver at \$1,400 (in lieu of engraver at \$1,200)				200.00
Engraver at \$80 (in lieu of engraver at \$70)				20.00
Chief plate printer at \$1,000 (in lieu of chief plate printer at \$1,400)				200.00
Plate printer at \$1,400 (in lieu of plate printer at \$1,200)				200.00
Plate printer at \$1,200 (in lieu of plate printer at \$1,000)				200.00
Two plate printers at \$1,000 each (in lieu of two plate printers at \$900 each)				200.00
Plate printer at \$500 (in lieu of plate printer at \$800)				100.00
Total.....				102,290.00
				105,740.00

NOTE.—Statement showing persons employed in the Bureau of Equipment under authority of the legislative, executive, and judicial appropriation act approved June 17, 1910, as draftsmen or for other technical purposes, and paid from the appropriation "Equipment of Vessels" in accordance with the provisions contained in the naval appropriation act approved June 24, 1910.

Comparative statement of estimates and appropriations, 1911-12, Navy Department—Continued.

	Appropriated, 1911.	Estimates, 1912.	Increase of esti- mates for 1912 over amount appropriated for 1911 for same purpose.	Decrease of esti- mates for 1912 as compared with amount appropriated for 1911 for same purpose.	New items 1912.
Navy Department.					
Bureau of Equipment—Continued.					
Hydrographic Office—Continued.					
Salaries—Continued.					
Apprentice plate printer at \$600 (in lieu of apprentice plate printer at \$700)			\$100.00		
Apprentice plate printer at \$750 (in lieu of apprentice plate printer at \$600)			120.00		
Lithographer at \$1,200 (in lieu of lithographer at \$1,000)			200.00		
Contingent and miscellaneous expenses, Hydrographic Office—					
Purchase of copperplates, etc.	\$7,000.00	\$7,000.00			
Purchase of one lithographic printing press	4,000.00	4,000.00			
Purchase of one folding machine	11,000.00	11,000.00			
Contingent expenses, Branch offices	17,900.00	17,900.00			
For services of necessary employees at branch offices	2,000.00	2,000.00			
Pilot chart, North Pacific Ocean					\$1,000.00
					700.00
Total	140,160.00	148,400.00	8,240.00		4,700.00
Naval Observatory—					
Salaries					
Assistant astronomer at \$2,000 (in lieu of assistant astronomer at \$1,800)	43,240.00	44,280.00	200.00		
Two assistants at \$1,200 each (in lieu of two assistants at \$1,600)			400.00		
Storeman and packer at \$780 (in lieu of laborer at \$660)			120.00		
Library attendant at \$780 (in lieu of laborer at \$660)			120.00		
Contingent and miscellaneous expenses—					
Miscellaneous computations	5,000.00	5,000.00			
Books, etc.	750.00	750.00			
Apparatus, etc.	2,000.00	2,000.00			
New flar micrometer for 29" equatorial (submitted)			2,500.00		2,500.00
Repairs, etc.	3,000.00	3,000.00			
Fuel, etc.	8,000.00	8,000.00			
Total	61,990.00	65,530.00	3,540.00		2,500.00
Nautical Almanac Office—					
Salaries					
Pay of computers on piecework, etc.	15,440.00	15,440.00			
	7,000.00	7,000.00			
Total	22,440.00	22,440.00			

26,380.00	35,080.00	500.00	8,200.00
2,000.00	2,000.00	2,000.00	2,000.00
1,400.00	1,400.00	1,400.00	1,400.00
3,000.00	3,000.00	3,000.00	3,000.00
840.00	840.00	840.00	840.00
480.00	480.00	480.00	480.00
8,700.00	8,700.00	8,700.00	8,700.00

26,380.00	35,080.00	500.00	8,200.00
57,800.00	58,300.00	500.00	500.00
57,800.00	58,300.00	500.00	500.00

Bureau of Steam Engineering:
 Salaries.....
 Increase of salary of chief clerk, submitted.....
 Finance clerk.....
 Head file clerk.....
 Three stenographers and typewriters, \$1,000 each.....
 Copyist for file room.....
 Messenger boy.....
 Laborer for blueprint room.....
 Total.....

NOTE.—The new positions amounting to \$8,200 included in this estimate will not be required if the Bureau of Equipment is not reestablished, and the distribution of duties and clerical force remains as at present.

NOTE.—Statement of persons employed in this bureau under the legislative, executive, and judicial act of June 17, 1910, as draftsmen, and for other technical purposes, and the compensation now paid to each under the appropriation "Steam machinery, 1911."

Rating.	No.	Pay as now employed.		No.	Pay as proposed.	
		Per diem.	Per annum.		Per diem.	Per annum.
Chief draftsman.....	1	\$10.00	\$3,130.00	1	\$10.00	\$3,130.00
Leading draftsman.....	1	8.00	2,504.00	1	8.00	2,504.00
Leading draftsman.....	1	7.52	2,353.76	1	7.52	2,353.76
Draftsmen.....	2	7.04	2,203.52	2	6.48	2,028.24
Draftsmen.....	2	6.00	1,878.00	2	5.52	1,727.76
Draftsmen.....	3	5.04	1,577.52	3	4.72	1,477.36
Draftsmen.....	4	4.48	1,402.24	1	3.52	1,101.76
Draftsmen.....	1	3.04	951.52	1	3.04	951.52
Total.....	17		28,643.76	17		31,750.72

Bureau of Construction and Repair:

Salaries.....	500.00
One chief clerk at \$2,500 in lieu of one chief clerk at \$2,000 omitted.....	500.00
Total.....	500.00

Comparative statement of estimates and appropriations, 1911-12, Navy Department—Continued.

Navy Department.	Appropriated, 1911.	Estimates, 1912.	Increase of esti- mates for 1912 over amount appropriated for 1911 for same purpose.	Decrease of esti- mates for 1912 as compared with amount appropriated for 1911 for same purpose.	New items, 1912.
1 chief draftsman.....	\$10.00	\$3,130.00	\$3,130.00		
1 leading draftsman.....	9.00	2,817.00	2,817.00		
1 electrical expert aid.....	8.00	2,594.00	2,594.00		
1 leading draftsman.....	7.52	2,353.76	2,353.76		
2 draftsman, each.....	7.04	2,333.52	4,667.04		
5 draftsman, each.....	6.45	2,028.25	10,141.25		
6 draftsman, each.....	6.00	1,878.00	13,146.00		
9 draftsman, each.....	5.52	1,727.76	13,822.08		
2 draftsman, first class, each.....	5.04	1,577.52	3,155.04		
4 assistant electrical expert aid.....	4.08	1,577.52	1,577.52		
7 draftsman, second class, each.....	4.00	1,267.54	8,768.00		
2 draftsman, third class, each.....	3.60	1,196.80	2,393.60		
3 draftsman, fourth class, each.....	3.28	1,036.64	3,079.92		
1 assistant draftsman, first class, each.....	2.80	876.40	5,776.40		
1 assistant draftsman, second class.....	2.00	626.00	626.00		
1 assistant draftsman, fourth class (vacant).....					
Total.....			78,262.62		
Bureau of Ordnance:	\$32,960.00	\$35,260.00			
Salaries:			\$500.00		
Chief clerk, at \$2,500 (increase of \$500 submitted).....			1,800.00		\$1,800.00
Clerk of class 4 (new).....			2,300.00		1,800.00
Total.....	32,960.00	35,260.00			

NOTE.—Statement of persons employed as draftsmen and for other technical services, and the compensation paid to each under appropriation "Ordnance and ordnance stores," in this bureau under legislative, executive, and judicial act of June 17, 1910:

Rating.	Per diem.	Per annum.	Total.
Electrical expert and draftsman.....	\$7.04	\$2,203.52	\$2,203.52
Draftsman.....	5.52	1,727.76	1,727.76
Do.....	4.00	1,252.00	1,252.00
Total.....			5,183.28
Bureau of Supplies and Accounts:			
Salaries.....			113,820.00
Clerk class 4 in lieu of clerk class 1.....			600.00
Clerk class 3 in lieu of clerk at \$1,000.....			600.00
Four clerks class 2 in lieu of four clerks at \$1,000 each.....			1,600.00
Five clerks at \$1,000 each in lieu of five clerks at \$1,000 each.....			5,000.00
Clerk at \$1,000 in lieu of copyist at \$840.....			1,600.00
Two laborers in lieu of two laborers at \$600 each.....			1,200.00
Messenger boy at \$600 in lieu of messenger boy at \$400.....			200.00
Total.....			3,780.00
Bureau of Medicine and Surgery:			
Salaries.....			18,800.00
Chief clerk at \$2,500 in lieu of chief clerk at \$2,000.....			500.00
Clerk of class 4 in lieu of copyist at \$840.....			900.00
Total.....			1,400.00
Bureau of Yards and Docks:			
Salaries.....			20,640.00
Chief clerk, at \$2,500 (increase of \$500 submitted).....			500.00
Clerk of class one (submitted).....			1,200.00
Total.....			1,700.00
Total.....			
	110,040.00	113,820.00	113,820.00
	17,340.00	18,800.00	18,800.00
	17,340.00	18,800.00	18,800.00
	18,940.00	20,640.00	20,640.00
	18,940.00	20,640.00	20,640.00
			1,200.00
			1,200.00

Comparative statement of estimates and appropriations, 1911-12, Navy Department—Continued.

Navy Department.	Appropriated, 1911.	Estimates, 1912.	Increase of estimates for 1912 over amount appropriated for 1911 for same purpose.	Decrease of estimates for 1912 as compared with amount appropriated for 1911 for same purpose.	New items, 1912.
NOTE.—Statement in detail showing the number of persons employed under the Bureau of Yards and Docks during the fiscal year 1910, and the compensation paid to each under the appropriations for public works, submitted in accordance with the act of February 26, 1907. (34 Stat. L., 973.)					
One draftsman in charge.....	\$6.48	298	\$1,931.04		
One expert aid.....	6.48	298	1,931.04		
One first-class draftsman.....	5.52	200	1,104.00		
One first-class draftsman.....	5.52	259	1,429.68		
One first-class draftsman.....	5.52	313	1,727.76		
One first-class draftsman.....	5.52	291	1,606.82		
One first-class draftsman.....	5.52	181	999.12		
One second-class draftsman.....	5.04	203	1,025.64		
One second-class draftsman.....	5.04	254	1,280.16		
One second-class draftsman.....	5.04	254	1,280.16		
One second-class draftsman.....	5.04	258	1,300.82		
One third-class draftsman.....	4.72	199	978.81		
One third-class draftsman.....	4.72	104	470.23		
One third-class draftsman.....	4.72	265	1,250.80		
One third-class draftsman.....	4.72	251	1,124.48		
One first-class assistant draftsman.....	4.48	219	876.00		
One first-class assistant draftsman.....	4.00	203	812.00		
One first-class assistant draftsman.....	4.00	181	724.00		
One first-class copyist draftsman.....	3.28	303	993.84		
One first-class copyist draftsman.....	3.28	20	68.47		
One first-class copyist draftsman.....	3.28	296	970.88		
One first-class copyist draftsman.....	3.28	174	57.07		
One third-class copyist draftsman.....	2.80	208	582.40		
One minor under instruction.....	2.00	62	124.00		
One minor under instruction.....	2.00	20	40.00		
One first-class copyist draftsman.....	3.28	131	429.68		
One minor under instruction.....	2.00	241	616.96		

One first-class draftsman.....	5 53	98 11, 092 96			
One first-class copyist draftsman.....	3 36	22 77 16			
One bluprinter.....	3 46	240 665 20			
One first-class copyist draftsman.....	1 28	100 328 00			
One expert aid.....	2 71	58 161 28			
One draftsman.....	2 48	27 43 00			
One draftsman.....	2 00	70 64 00			
One draftsman.....	2 46	86 557 28			
Total.....		29, 535 90			
Contingent expenses, Navy Department.....		\$66, 500.00	\$72, 500.00	\$1, 000.00	\$5, 000.00
For professional and technical books, etc., for department library.....				5, 000.00	
Fireproof filing equipment (new).....				6, 000.00	
Total.....		66, 500.00	72, 500.00	6, 000.00	5, 000.00

RECAPITULATION.

Secretary's office.....	\$73, 460.00	\$74, 400.00	\$1, 000.00		
Office of the Solicitor.....	16, 990.00	16, 990.00			
Library of the Navy Department.....	3, 960.00	3, 960.00			
Office of Naval Records of the Rebellion.....	38, 340.00	38, 340.00			
Office of the Judge-Advocate-General.....	10, 120.00	12, 370.00	2, 250.00		\$2, 250.00
Bureau of Navigation.....	18, 900.00	64, 600.00	5, 700.00		1, 800.00
Office of Naval Intelligence.....	12, 000.00	12, 700.00	600.00		600.00
Bureau of Equipment.....	42, 000.00	35, 400.00	500.00		1, 700.00
Hydrographic Office.....	61, 900.00	145, 400.00	8, 260.00		2, 500.00
Nautical Almanac Office.....	27, 440.00	29, 440.00	3, 540.00		8, 300.00
Bureau of Steam Engineering.....	26, 380.00	35, 080.00	8, 700.00		
Bureau of Construction and Repair.....	57, 800.00	58, 300.00	500.00		
Bureau of Ordnance.....	32, 960.00	35, 250.00	2, 300.00		1, 800.00
Bureau of Supplies and Accounts.....	110, 040.00	113, 820.00	3, 780.00		
Bureau of Medicine and Surgery.....	17, 340.00	18, 800.00	1, 460.00		
Bureau of Yards and Docks.....	18, 940.00	20, 640.00	1, 700.00		1, 200.00
Contingent expenses, Navy Department.....	66, 500.00	72, 500.00	6, 000.00		5, 000.00
Total.....	821, 340.00	867, 670.00	46, 330.00		28, 110.00
Printing and binding (sundry civil bill): ^a					
For the Navy Department, \$153,000, including not exceeding \$25,000 for the Hydrographic Office.....	153, 000.00	153, 090.00			

^a Not included in recapitulation.

Comparative statement of estimates and appropriations, 1911-12, Navy Department—Continued.

NOTE.—Explanation of differences in statements of Navy and Treasury Departments as to amounts appropriated 1911 and amounts estimated 1912.

	Appropriated, 1911.	Estimates, 1912.
Naval bill.....	\$131,404,640.15	\$127,016,159.24
Legislative bill.....	821,340.00	867,670.00
Stundry civil bill.....	153,000.00	153,000.00
Total Navy Department figures.....	132,378,980.15	128,036,829.24
The Treasury Department in its statement of appropriations and estimates includes the following items, which do not appear above:		
Chains arising under the Navy Department act of June 25, 1910.....	30,084.16	72,829.00
Naval Home, Philadelphia, Pa. (see note under Bureau of Navigation).....	70,005.86	1,955,000.00
Other permanent and indefinite appropriations which are estimated for by the Treasury Department.....	2,125,000.00	
\$153,000 for Navy Department printing and binding is included in the Navy Department's statement, while in the statement of the Treasury Department it is included in the estimate for the Public Printer.....	153,000.00	153,000.00
\$64,677.71 for power plant at Naval Station, New Orleans, La., is included in Navy Department's statement, but in Digest of Appropriations issued by Treasury Department it is treated as being a transfer between appropriations and not a new appropriation. Comptroller of Treasury, October 31, 1910, held it to be a new appropriation.....	64,677.71	
Total Treasury Department figures.....	134,386,992.46	129,911,658.24
Under date of November 28, 1910, the Navy Department requested the Secretary of the Treasury to take the necessary steps to reduce the estimates of the Navy Department already submitted in the following amounts:		
Bureau of Construction and Repair—		
Construction and repair of vessels, reduce from \$8,979,144 to \$5,479,144, a decrease of.....	\$500,000.00	
Bureau of Steam Engineering—		
Cut out all estimates for machinery plants, as follows—		
Navy-yard, Portsmouth, N. H.....	\$25,000.00	
Navy-yard, New York, N. Y.....	30,000.00	
Navy-yard, Norfolk, Va.....	20,000.00	
Navy-yard, Mare Island, Cal.....	25,000.00	
Increase of the navy (first year of proposed building programme, 1912)—		
Construction and machinery, reduce from \$1,438,000 to \$1,050,000, a decrease of.....	\$40,000.00	
Armor and armament, reduce from \$6,779,928 to \$6,760,428, a decrease of.....	29,500.00	
	369,500.00	
	909,500.00	

thus changing the figures in the statement above to the following:

Naval bill, revised.....	131,404,640.15	126,046,686.24
Legislative bill.....	821,340.00	867,670.00
Sundry civil bill.....	153,000.00	153,000.00
Total Navy Department figures, revised.....	132,378,980.15	127,067,326.24
The Treasury Department in its statement of appropriations and estimates includes the following items, which do not appear above:		
Claims arising under the Navy Department, act of June 25, 1910.....	30,084.16	72,829.00
Naval Home, Philadelphia, Pa. (see note under Bureau of Navigation).....	70,603.86	1,955,000.00
Other permanent and indefinite appropriations which are estimated for by the Treasury Department.....	2,125,000.00	
Total Treasury Department figures, revised.....	134,604,670.17	129,095,155.24
\$153,000 for Navy Department printing and binding is included in the Navy Department's statement, while in the statement of the Treasury Department it is included in the estimate for the Public Printer.	153,000.00	153,000.00
\$64,677.71 for power plant at Naval Station, New Orleans, La., is included in Navy Department's statement, but in Digest of Appropriations issued by Treasury Department it is treated as being a transfer between appropriations and not a new appropriation. Comptroller of Treasury, October 31, 1910, held it to be a new appropriation.	64,677.71	
Total Treasury Department figures, revised.....	134,386,992.46	128,942,155.24

REPORT OF THE SOLICITOR.

NAVY DEPARTMENT,
OFFICE OF THE SOLICITOR,
Washington, September 27, 1910.

SIR: Conformably to the instructions contained in the department's letter of the 28th of July last, the following report is submitted concerning the operations of this office for the last fiscal year:

The business transacted has received from the clerical force the zealous and unremitting attention that the intricate and important character of the work demands, and the results have been gratifying. Since the 2d of February, when the present incumbent assumed his duties, the office has had its full number of employees authorized by law. This condition, which, as pointed out in the report for the previous year, the office had not enjoyed for a considerable time, admitted of a more satisfactory and efficient disposition of the work assigned to the office.

Several cases have arisen in which unusual questions of law have been presented, the principal two of which are mentioned below, and, while they have not been settled finally, as they will require judicial determination, it is believed that the Government's contention in each case will be sustained. The first of the cases referred to involves the validity or rather perhaps the binding force of certain sections of the Revised Statutes relating to public contracts. In this case the New York and Porto Rico Steamship Company, whose bid for transporting coal to San Francisco was accepted and to whom contract was awarded accordingly, was unable to obtain vessels in which to ship the coal at the prescribed times. The company requested that cargoes then on the way to Honolulu be diverted, at their expense, from their port of destination to San Francisco, and the department complied with such request, incurring an additional expense of \$7,200.

The company failed to sign and return, as requested, a formal instrument sent to it for execution on the acceptance of its proposal, and after having, in writing, admitted its responsibility in the premises and signified its willingness to pay the additional expense incurred on this account, refused, after much correspondence and conference, to reimburse the department. Its contention was that, as no formal instrument had been actually signed by both parties "at the end thereof," the agreement would not be enforceable against the Government, and, therefore, was necessarily not enforceable against the company, and the company not bound to pay the difference between its proposal and the price at which the transportation of coal was finally secured by the department (\$7,200), and that the actual agreement between the company and the Government was "void"

and of no effect for any purpose. Such contention is, in the judgment of this office, erroneous, at variance with the decisions of the courts, sound business principles, and fair dealing, and if admitted or sustained would be subversive of the Government's interests in a high degree. The company has been debarred from bidding to furnish services or supplies for the navy in the future, and the Attorney-General has been requested to institute proceedings against it to recover damages for the Government.

The other case referred to above pertains to claims growing out of the contracts for the construction of certain vessels for the navy. The contractors received payment in settlement under the contracts and executed final releases as required. They afterwards brought suit in the Court of Claims to recover damages said to have resulted from delay on the part of the Government in furnishing the armor for the vessels. The claim was allowed by the Court of Claims, but the decision of that tribunal was reversed by the Supreme Court of the United States on the ground that the final release executed by the contractors precluded them from any remedy at law. The contractors then petitioned the Court of Claims for a reformation of the contracts on the ground that the provision of the contract calling for a final release was not intended by the parties to secure a release from the contractor of claims for damages sustained by a so-called breach of the contract by the Government consisting of its failure to furnish the armor to the contractors as stipulated in the contract. The efficacy of the provision requiring final release, which has been in use ever since the construction of the new navy was begun, is threatened, and this office has cheerfully aided the Department of Justice in obtaining information from the records for use in maintaining the Government's position in the case. The question raised here is far-reaching, and the defeat of the contractors' contention is of vital importance to the Government's interests.

The purchase of land for beacon sites in connection with the establishment of the deep-water trial course off Rockland, Me., has been practically effected, except so far as affects sites desired on Monroe Island and Sheep Island, which it will be necessary to obtain by condemnation, and proceedings for this purpose have been begun by the Department of Justice. As soon as the question of title to all the lands is settled, the erection of the new beacons can be undertaken, and when they are finished the trial boards will be able to obtain more accurate and satisfactory results from the speed tests than have ever been secured in making the trials of vessels of the navy.

The construction of a branch railroad track from the main lines of the Philadelphia, Washington and Baltimore Railroad Company to the navy-yard, which was provided for in the naval appropriation act approved on the 24th of June last, will unavoidably be retarded somewhat by reason of the fact that the title to the lands over which the road is to run and upon which the switches and turn-outs for the extension of the yard system are to be laid is unsettled. The exact line to be followed by the track has been definitely fixed as contemplated by the act, but the Government's claim to the land is disputed by various persons claiming ownership. The matter is under advisement by the Attorney-General, and it is believed that a satisfactory

result will be arrived at in such time as to avoid serious delay in the beginning of the work.

The insertion in the last naval appropriation act of a provision that the contracts for the construction of the battle ships and the colliers shall contain a provision requiring those vessels to be built in accordance with the terms of the eight-hour labor law of August 1, 1892, marks an epoch in the construction of naval vessels by contract. The various shipbuilding firms have exhibited great concern as to the effect this provision may have on the shipbuilding industry in general, and the attitude of the builders toward the question as to whether the contracts for these vessels will be desirable undertakings, is uncertain. Proposals for the construction of the vessels of both classes will be opened on the 1st of December next.

Attention is again invited to the physical conditions under which the work of the office is carried on. The two rooms occupied afford inadequate space, and the consequent crowding of the employees is a hindrance to the performance of their duties, and it is earnestly requested that one additional room be provided for the use of the office.

The law library possessed by the office, though such books as are in it are in the main useful and appropriate, is inferior, and the dispatch of business would be facilitated if a more adequate library could be obtained. It is requested, therefore, that an appropriation of \$500 be requested for the purchase of books that would be of value for the legal researches necessary to be made in connection with important cases frequently arising.

Extensive negotiations have been had through this office with the owners for the purchase of "Normanstone," a small tract of land lying within the Naval Observatory Circle. The acquisition of this land was authorized by Congress sixteen years ago, but was not effected, because the owners were not satisfied with the valuation thereof fixed by the board of appraisers. It seems probable at this time that the transaction will be concluded by mutual agreement between the parties.

Negotiations are now under way for the purpose of acquiring a tract of land, containing about 5 acres, adjacent to the present hospital site at Newport, R. I., to be purchased from the hospital fund. The department was unsuccessful in its endeavors to reach an agreement with the owners as to the proper price to be paid for this land, and, accordingly, steps have been taken to institute condemnation proceedings for its acquisition. It is thought that these proceedings will be heard at the fall term of the United States district court for the district of Rhode Island.

During the week of August 17 to 23, both days inclusive, by order of the secretary, the pieces of incoming and outgoing mail for this office were counted, and found to average 76 outgoing and 70 incoming per day. This was below the daily average for the year.

To the duties of the office of the solicitor as heretofore existing, comprising and relating to the examination and report upon—

questions of law, including the drafting and interpretation of statutes, and matters submitted to the accounting officers not relating to the personnel; preparation of advertisements, proposals, and contracts; insurance; patents; the sufficiency of official, contract, and other bonds and guaranties; proceedings in the civil courts by or against the Government or its officers; claims by or

against the Government; questions submitted to the Attorney-General, except such as relate to questions of personnel; bills and congressional resolutions and inquiries not relating to the personnel and not elsewhere assigned; the searching of titles, purchase, sale, transfer, and other questions affecting lands and buildings pertaining to the navy; the care and preservation of all muniments of title to land acquired for naval uses; and the correspondence respecting the foregoing duties; and rendering opinion upon any matter or question of law referred to him by the Secretary of the Navy—

there have been added the matters pertaining to the sale of condemned vessels of the navy.

Attached hereto is a copy of the estimates of appropriations required for the fiscal year ending June 30, 1911.

Respectfully submitted.

HENRY M. BUTLER,
Solicitor.

The SECRETARY OF THE NAVY.

REPORT OF THE JUDGE-ADVOCATE-GENERAL.

NAVY DEPARTMENT,
OFFICE OF THE JUDGE-ADVOCATE-GENERAL,
Washington, September 27, 1910.

SIR: In compliance with the department's order of July 28, 1910, I have the honor to submit herewith a report of the operations of this office for the fiscal year ending June 30, 1910.

Capt. Edward H. Campbell, U. S. Navy, was relieved by me as Judge-Advocate-General on November 4, 1909.

A general résumé of the work of the office follows:

GENERAL COURTS-MARTIAL.

Charges and specifications drawn up in the office during the fiscal year.

	Navy.	Marine Corps.	Total.
Officers.....	11	3	14
Enlisted men.....	1,168	273	1,441
Total.....	1,179	276	1,455

Charges withdrawn.

To other general courts-martial.....	10
To summary courts-martial.....	6
On account of insanity or physical disability.....	2
Prisoners escaped.....	5
Nolle prossed.....	2
Convicted by civil court before trial by general court-martial.....	1
By order of the department.....	2
Total.....	28
Trials delayed on account of sickness and other reasons.....	9
Total.....	37
Cases tried by order of the department.....	1,418

Trials held at each naval station.

Portsmouth, N. H.....	42
Boston, Mass.....	195
New York, N. Y.....	310
Philadelphia, Pa.....	231
Washington, D. C.....	12
Norfolk, Va.....	291
Mare Island, Cal.....	215
Puget Sound, Wash.....	67
Annapolis, Md.....	19
Port Royal, S. C.....	7
Special.....	29
Total.....	1,418

Trials by order of officers authorized to convene general courts-martial.

	Navy.	Marine Corps.	Total.
Officers.....	17	1	18
Enlisted men.....	236	79	315
Total.....	253	80	333

Total trials.

	Navy.	Marine Corps.	Total.
Officers:			
By order of the Secretary of the Navy.....	9	3	12
By order of other officers.....	17	1	18
Total.....	26	4	30
Enlisted men:			
By order of the Secretary of the Navy.....	1,142	264	1,406
By order of other officers.....	236	79	315
Total.....	1,378	343	1,721
Grand total.....	1,404	347	1,751

Trials of officers.

Convicted.....	22
Acquitted.....	7
Disapproved.....	1
Total.....	30

Trials of enlisted men.

	Navy.	Marine Corps.	Total.
Convicted.....	1,330	329	1,659
Acquitted.....	39	12	51
Disapproved.....	9	2	11
Total.....	1,378	343	1,721

Schedule of principal offenses.

OFFICERS.

	Navy.	Marine Corps.	Total.
Absence without leave.....	1		1
Absence without leave and conduct to the prejudice of good order and discipline.....	1		1
Absence without leave and falsehood.....	1		1
Absence without leave and drunkenness.....		1	1
Conduct to the prejudice of good order and discipline.....	1	1	2
Conduct to the prejudice of good order and discipline and using profane and abusive language to another person in the service.....	2		2
Conduct to the prejudice of good order and discipline and drunkenness.....	1		1
Conduct unbecoming an officer and a gentleman.....	1		1
Conduct unbecoming an officer and a gentleman and when on shore maltreating an inhabitant.....	1		1
Conduct unbecoming an officer and a gentleman and scandalous conduct.....		1	1
Drunkenness.....	1		1
Drunkenness, conduct to the prejudice of good order and discipline, being disrespectful in language and deportment to a superior officer, and disobeying a lawful order of a superior officer.....		1	1
Embezzlement in violation of article 14, A. G. N., and culpable inefficiency.....	1		1
Falsehood.....	1		1
Falsehood and scandalous conduct.....	1		1
Negligence in the performance of duty.....	1		1
Stealing and selling property of the United States in violation of article 14, A. G. N.....	1		1
Stealing and selling property of the United States in violation of article 14, A. G. N., and falsehood.....	1		1
Through negligence, suffering a vessel of the United States to be run upon a rock or shoal or hazarded.....	2		2
Disapproved.....	1		1
Acquitted.....	6	1	7
Total.....	25	5	30

ENLISTED MEN.

Absence without leave.....	232	46	278
Absence without leave and breaking arrest.....	17	3	20
Absence without leave and fraudulent enlistment.....	6	3	9
Absence without leave and conduct to the prejudice of good order and discipline.....	77	22	99
Assaulting another person in the service.....	12	3	15
Assault with intent to kill.....	3	1	4
Assaulting a sentinel.....	2	2	4
Assaulting and striking a superior officer, or threat of same.....	10	1	11
Assault with a deadly weapon and wounding another person in the service.....	3	1	4
Breaking arrest.....	2		2
Conduct to the prejudice of good order and discipline.....	41	17	58
Culpable inefficiency in the performance of duty.....	1		1
Desertion.....	543	58	601
Desertion and fraudulent enlistment.....	88	36	124
Desertion and conduct to the prejudice of good order and discipline, or breaking arrest, or scandalous conduct.....	20	3	23
Disobeying a lawful order.....	8	1	9
Disrespectful in language and deportment to a superior officer.....	2	1	3
Drunkenness.....	8	1	9
Drunkenness on duty.....	9	25	34
Falsehood.....	2		2
Fraudulent enlistment.....	135	44	179
Leaving station before being regularly relieved.....	1	14	15
Neglect of duty.....	1	5	6
Refusing to obey the lawful order of a superior officer.....	13	2	15
Resisting arrest.....		2	2
Robbery.....		2	2
Scandalous conduct.....	33	5	38
Sleeping on watch or post.....	5	14	19
Sodomy.....	5	2	7
Theft.....	33	6	39
Using abusive, profane, or obscene language to a superior officer or to another person in the service.....	7	2	9
Willful destruction of public property.....		1	1
Violation of article 14, A. G. N.; stealing, selling, embezzling, or unlawfully disposing of government property.....	8	5	13
False swearing.....	2	1	3
Arson.....		1	1
When on shore, maltreating an inhabitant or injuring his property in any way.....	1		1
Disapproved.....	9	2	11
Total.....	1,339	331	1,670

Percentages of enlisted personnel in the Navy and Marine Corps tried by court-martial.

	Navy.	Marine Corps.
Total enlisted force July 1, 1909.....	44,129	9,349
Enlisted during the year (approximate).....	10,662	4,301
Total during year subject to trial (approximate).....	54,791	13,650
Tried and convicted by general court-martial during year.....	1,339	331
Percentage tried and convicted by general court-martial.....	2.44	2.42
Tried by summary court-martial during year.....	8,457	1,545
Percentage tried by summary court-martial.....	15.43	11.32
Tried by deck court during year.....	10,915	2,759
Percentage tried by deck court.....	19.92	20.21

SUMMARY COURTS-MARTIAL.

	Navy.	Marine Corps.	Total.
Records received and revised.....	8,457	1,545	10,002
Cases disapproved by department.....			180
Acquitted.....			109
Bad conduct discharges.....	1,499	287	1,786
Average trials per month.....			833

DECK COURTS.

	Navy.	Marine Corps.	Total.
Records received and revised.....	10,915	2,759	13,674
Disapproved.....			21
Acquitted.....			130
Average trials per month.....			993

COMPARATIVE STATEMENT FOR FISCAL YEARS 1910-1909.

	1910.	1909.
Trials by general courts-martial.....	1,751	2,205
Trials by summary courts-martial.....	10,002	9,127
Trials by deck courts-martial.....	13,674	1,761
Total trials by courts-martial.....	25,427	13,093

* Deck courts authorized February 16, 1909. First record received March 11, 1909.

Showing an increase of 12,334 trials by courts-martial, or 94.20 per cent, as compared with last year, due principally to institution of deck courts.

MISCELLANEOUS.

	1910.	1909.
Courts of inquiry received and examined.....	29	11
Courts of inquiry followed by courts-martial.....	7	3
Courts of inquiry in which no further action was taken.....	22	8
Boards of investigation received and examined.....	134	51
Boards of inquest received and examined.....	80	62

EXAMINING BOARDS.

Officers of the Navy.

Examined for promotion.....	360
Failed professionally.....	9
Failed physically.....	3
Failed morally.....	1
Passed for promotion.....	347

Officers of the Marine Corps.

Examined for promotion.....	13
Failed professionally.....	1
Failed physically.....	1
Passed for promotion.....	11

RETIRING BOARDS.

Officers of the Navy.....	58
Officers of the Marine Corps.....	8
Total.....	66

EXAMINING BOARDS OF CANDIDATES FOR ADMISSION TO NAVAL SERVICE AS OFFICERS.

Pay Corps.

Examined for admission.....	23
Failed professionally.....	13
Failed physically.....	3
Failed professionally and physically.....	2
Passed and appointed.....	4
Withdrew.....	1

Medical Corps.

Examined for admission.....	89
Failed professionally.....	13
Failed physically.....	23
Passed and appointed.....	36
Withdrew.....	17

Chaplain.

Examined and appointed.....	1
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EXAMINING BOARDS—CANDIDATES FOR SECOND LIEUTENANT, UNITED STATES MARINE CORPS, PASSED UPON IN THIS OFFICE.

Examined.....	22
Passed.....	20
Failed professionally.....	1
Failed physically.....	1

LEGISLATION.

SENATE AND HOUSE BILLS REFERRED TO DEPARTMENT FOR RECOMMENDATION.

Senate bills.

Private:	
Favorable action recommended.....	4
Unfavorable action recommended.....	30
Total.....	34

Public:	
Favorable action recommended.....	11
Unfavorable action recommended.....	4
Total.....	15
<hr/>	
Total Senate bills referred.....	49

House bills.

Private:	
Favorable action recommended.....	11
Unfavorable action recommended.....	27
Answered without specific recommendation.....	5
Total.....	43
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Public:	
Favorable action recommended.....	15
Unfavorable action recommended.....	4
Answered without specific recommendation.....	3
Total.....	22
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Total House bills referred.....	65

Statutes drafted.

Public bills drafted and submitted to Congress.....	30
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PARDONS.

Pardons requested.....	19
Recommended.....	6
Not recommended.....	7
Answered without recommendation.....	6

CIVIL-WAR DESERTIONS.

Requests for removal of charge.....	52
Granted.....	19
Not granted.....	33
Requests for information relative to removal of charge.....	6

HONORABLE CIVIL-WAR SERVICE.

Inquiries as to whether service was honorable.....	45
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COMPTROLLER'S DECISIONS.

Requests for, by disbursing officers, etc.....	121
Referred to comptroller.....	88
Answered by the department.....	33

NEW FORMS OF PROCEDURE FOR COURTS AND BOARDS.

The new "Forms of Procedure for Naval Courts and Boards" were approved by the department on January 7, 1910, and copies thereof have been issued to all navy-yards, naval stations, marine barracks, courts and boards, ships in commission, and to the Superintendent of the Naval Academy for the instruction of midshipmen. In addition, copies have been issued to individual officers, as deemed desirable.

NAVAL PRISONS AND PRISON SHIPS.

The same naval prisons and prison ships have been in use as described in the last annual report of the Judge-Advocate-General, and, from reports received in this office, they appear to be in efficient condition.

The following recommendations, in which I concur, were made in the report of this office for the fiscal year 1909, concerning improvements to naval prisons, for which no appropriation has yet been made:

NAVAL PRISON, PORTSMOUTH, N. H.

It is very desirable that this prison be extended and be made as nearly complete in itself as practicable. The second wing should contain workshops for the indoor employment of the prisoners when the outside improvements shall have been completed.

NAVAL PRISON, CAVITE, P. I.

Inasmuch as there will in all probability be a United States naval force in Philippine waters for some years to come, it would seem advisable that a new prison be constructed, with cells and accommodations for about 60 general court-martial prisoners, and that alterations be made to the buildings now used for prison purposes, making them more sanitary and fitting them as a place for the confinement of summary and deck court-martial prisoners.

NAVAL PRISON, MARE ISLAND, CAL.

The following improvements are recommended by the commanding officer of the prison and appear to be desirable:

The addition of another wing to the prison, as provided for in the original plans, which will allow the prison to be absolutely independent of the marine barracks.

* * *

The installation of a laundry, * * * and mess hall in the prison. * * *
Larger lavatories, especially as regards bathing facilities.

LEGISLATION RECOMMENDED.

The status of bills relating to the personnel transmitted by the department to the naval committees of Congress with recommendation that such bills be enacted into law, but upon which final action has not been taken, is shown below:

Naturalization of alien enlisted men. S. 3782, H. R. 127, and H. R. 22763. The bill last named is pending before the House Committee on Immigration and Naturalization and embodies the department's views on the subject.

Death gratuity, amendment of provision relating to. No action taken by either committee, except that Senate committee thought it best to leave the matter to be disposed of in the new personnel bill.

Naval Home, deposit in Treasury unclaimed moneys of deceased inmates of. S. 3781 and H. R. 15683. Senate bill passed April 5, 1910; referred to House Committee on Naval Affairs April 6, 1910.

Chiefs of bureaus, retirement of, with rank and three-fourths pay received as chief of bureau. This included Captain Barton's case. The provision affecting all chiefs of bureaus was not introduced by either committee.

Constructive service, to provide for, in the case of commissioned and warrant officers appointed while serving in the Army, Navy, or Marine Corps. S. 4019 and H. R. 15636, also H. R. 19870 (Fairchild bill). The House bills just mentioned have been recommended to be modified by the department's letter to the House Naval Committee of June 8, 1910, but no action was taken thereon.

Surgeon of the fleet, changing title and repealing statute defining duties of. No action taken in the matter by either committee.

- Mail clerks*, amendment of law so as to include marines as well as enlisted men of the navy. Letters sent to both naval committees on December 13, 1909; no action taken by either committee.
- Frauds, etc., investigation of*; amendment to section 183, Revised Statutes, to permit officers of the navy to administer oaths. S. 4239 and H. R. 15685; no action upon either measure.
- Additional numbers*, to permit the voluntary retirement of officers who are. The original bills relating to this matter (S. 4238 and H. R. 15684) are now pending before the respective naval committees. (See next entry.)
- Engineer officers, former*, to make additional numbers. S. 4744 and H. R. 16910 pending before respective naval committees. (See next entry.)
- Officers performing engineering duty only*, to make additional numbers, and to provide for retirement of additional numbers. S. 7397 is a combination of the two foregoing measures, with certain modifications; pending before the Senate Naval Committee; no action by House committee.
- Acting assistant paymasters* and acting second lieutenants, to establish grades of. S. 4240 and H. R. 15687. Passed Senate May 6, 1910, and now pending before House Naval Committee. House bill favorably reported by the House Naval Committee and now on Union Calendar, No. 183.
- Physically disqualified for promotion*, officers of navy who are; to provide for retirement in next higher grade. S. 4746, which passed Senate May 6, 1910, and H. R. 16893 now pending before House Naval Committee.
- Acting assistant and assistant surgeons*, to equalize pay and allowances of. S. 4745 and H. R. 16892. Passed Senate June 23, 1910, and now pending before House Naval Committee. House bill favorably reported by the House Naval Committee and is now on Union Calendar, No. 184.
- Examining boards, change in composition of*, for examination of warrant officers. S. 4743 and H. R. 16890. Pending before respective naval committees.
- Medals of honor*, to provide for award of, to officers of the navy. S. 4742 and H. R. 16891, pending before respective naval committees.
- Administration of oaths*, to amend law relating to, and to provide for same by boards of inquest. S. 4741 and H. R. 16911. Senate bill passed April 5, 1910, and is now, together with House bill, pending before the House Naval Committee.
- Medical department of navy*, to increase efficiency of. S. 6576 pending before Senate Naval Committee; not introduced by House committee.
- Naval landing forces*, to provide for administration of discipline in. S. 7047 pending before Senate Naval Committee; not introduced by House committee. (This bill was combined with the next succeeding measure.)
- Administration of justice*, to amend act relating to. S. 7166 passed Senate April 5, 1910, and now pending before the House Naval Committee.
- Reserve personnel for navy and marine corps*. S. 7644 and H. R. 24942 pending before respective naval committees.
- To secure uniformity in time of commencement of pay of next higher grade upon promotion*. No action taken.
- Personnel bill*. S. 7909 and H. R. 22319 pending before the respective naval committees.
- Retirement of enlisted men after 16, 20, and 25 years*. S. 7765 favorably reported and now on Senate Calendar, No. 704. No action by House Committee. S. 6589 was also recommended favorably in case S. 7765 failed to receive the favorable action of the Senate Naval Committee. H. R. 57 was also reported upon earlier in the session and commended to the House Committee on Naval Affairs, though a draft identical with S. 7765 was later transmitted.
- Vice admirals*, to provide for appointment of. H. R. 15674 pending before House Naval Committee.
- The following public measures, affecting the personnel of the navy, which were referred to the department for recommendation in the premises during the second session of the Sixty-first Congress, received the department's approval, but have not yet become law:
- Naturalization of alien enlisted men*. S. 2628 pending before Senate Naval Committee.
- Assistant paymasters*, to provide for promotion of after three years' service. S. 825 passed Senate May 4, 1910, and now pending before House Naval Committee.
- Hospital corps*, to reorganize and increase efficiency. S. 1017, S. 6575, and H. R. 6184. The Senate bill, S. 6575, has received the department's approval, and is now pending before Senate Naval Committee.

- Dental surgeons*, appointment of, in navy. S. 1015, H. R. 6741, S. 8154, and H. R. 26189. The two measures last named are approved by the department, and now pending before naval committees.
- Naval militia*, to promote efficiency of. S. 8160 and H. R. 17759. This bill is favored with certain modifications; it has been reported by the House Naval Committee and is now on the Union Calendar, No. 307. No action taken by Senate Naval Committee.
- Midshipmen*, to commission upon graduation from Naval Academy. H. R. 9961 passed House May 16, 1910, and now pending before Senate Naval Committee.
- Revenue-Cutter Service*, time served in, to be counted in computing pay of officers in Army, Navy, or Marine Corps. H. R. 19632 pending before House Naval Committee.
- Wilkes, Rear-Admiral Charles*, to erect a monument to. S. 6876 and H. R. 25981. Senate bill passed Senate on June 23, 1910, and, together with House bill, is pending before the House Committee on Naval Affairs.
- Revolutionary war*, compilation of records of. S. 6991 and H. R. 22007. The Senate bill was favorably reported and is now on the Senate calendar, No. 736; no action by House Committee on Printing.
- Naval Observatory*, to establish and define duties. H. R. 22685. Passed House March 30, 1910; now pending before Senate Committee on Naval Affairs.
- Retired enlisted men*, advanced for creditable civil war service. S. 6440. No action taken.
- Pharmacists*, to be commissioned chief pharmacists. Amendment intended for H. R. 23311, appropriation bill, which amendment was not included therein.
- Commissions for officers retired* or advanced on retired list with increased rank. S. 7687 and H. R. 24256. House bill failed of passage; Senate bill pending before Senate Committee on Naval Affairs.
- Uniform of United States, to protect.* H. J. Res. 171 and S. 7131. Pending before respective committees.

INCREASED WORK OF OFFICE.

The business of this office has grown from time to time with the increases made in the personnel of the naval service, and such further growth may be expected in the future. In this connection it may be mentioned that while the institution of the deck court relieved commanding officers to a certain extent from the necessity of ordering summary courts-martial, the fact that commanding officers now have recourse to deck courts in cases where they formerly assigned a punishment within their own legal powers has increased considerably the business of this office, as the deck court requires a record which must be received, revised, and recorded here, and these cases entail considerable correspondence upon this office in connection therewith. Furthermore, it will be noted, by a reference to the statistics given above, that the number of trials by summary courts-martial has increased instead of decreased, notwithstanding the institution of the deck court.

Respectfully submitted.

ROBT. L. RUSSELL,
Judge-Advocate-General.

The SECRETARY OF THE NAVY.

REPORT OF BOARD OF VISITORS TO THE U. S. NAVAL ACADEMY, 1910.

ANNAPOLIS, MD., *June 3, 1910.*

SIR: The Board of Visitors to the United States Naval Academy respectfully submit the following report:

Upon presentation of their several letters of appointment, the members of the Board organized on the 31st day of May by electing Hon. Arthur L. Bates as president, with Professor of Mathematics Paul J. Dashiell, U. S. Navy, as permanent secretary to the Board by appointment.

The members participating in the organization and deliberations of the Board were:

Hon. George P. Wetmore, United States Senator from Rhode Island.
Hon. S. D. McEnery, United States Senator from Louisiana.
Hon. Arthur L. Bates, Representative from Pennsylvania.
Hon. George A. Loud, Representative from Michigan.
Hon. Lemuel P. Padgett, Representative from Tennessee.
Judge Edward O. Brown, Chicago, Ill.
Mr. Thomas R. Proctor, Utica, N. Y.
Mr. Thomas P. Fisk, Shelton, Wash.
Dr. J. P. McGowan, New York, N. Y.
Rev. John W. Dinsmore, San Jose, Cal.
Mr. Reginald H. Griffith, Austin, Tex.
Mr. Michael J. Donnelly, St. Paul, Minn.

The Board appointed the usual subcommittees to investigate the condition and needs of the academy. The superintendent of the academy, Capt. J. M. Bowyer, U. S. Navy, the commandant, and other heads of departments, officers on duty, and instructors, have rendered the Board every possible assistance in these investigations. The grounds and the buildings and vessels attached to the station have been inspected, various drills and exercises have been witnessed, and daily sessions of the Board have been held. Mr. L. P. Padgett was designated to represent the Board and make the address to the graduating class.

The Board wish to express, very cordially, their great satisfaction and pleasure with the fine conditions prevailing at the academy. In the opinion of the Board, the superintendent and heads of departments and officers and instructors fully appreciate the importance of the work in which they are engaged, and are discharging their duties faithfully and efficiently, and the student body are doing their work well, and the Board wish to commend the good discipline which is being maintained and enforced at the academy.

1. The Board wish to approve the recommendations of the Boards of 1907, 1908, and 1909, recommending and urging the value and importance of the Board's visiting the school at some period during the working year other than during June week. It is the opinion of the Board that the recommendations on this subject heretofore made are wise, and if carried out would result in good to the school.

2. The Board find that the bridge across Dorsey Creek connecting the main grounds with the hospital grounds is very old and is in a very dilapidated and dangerous condition, and should be replaced with a new masonry bridge with a steel draw. This bridge is very much needed for the efficient work and services of the school.

3. The Board think it would be wise to acquire the tract of ground consisting of three blocks at the south side of the academy grounds in order to complete and straighten the lines of the grounds. This ground is needed for the purposes of the academy, and many of the buildings thereon would serve for additional quarters for officers and instructors.

4. The Board find that the sewer drain from the kitchen in Bancroft Hall is defective, and if any stoppage occurs in the main pipes water is apt to back up through this and other outlets onto the kitchen floor, and this defective sewerage is a serious menace to the building and especially to the kitchen floor. To remedy the trouble the drainage of the kitchen of Bancroft Hall should be taken care of distinct from the sewerage which runs into the present system. Separate drains should be installed beneath the kitchen floor and a new sewer laid in front of the building to the quay wall and in as direct line as possible with the maximum fall, installing on present system automatic flush devices to keep sewer clear. It is believed this will correct and remedy the present trouble, and the Board recommend that careful consideration be given to the subject and steps be taken to remedy the conditions and, if necessary, that legislation be enacted to authorize the changes to be made.

5. The Board recommend that underground conduits for electric wires be built and all electric wires placed therein.

6. In view of the large crowds that attend the athletic games at the academy and the prominence and importance of the academy, the Board think it would be wise to build a concrete stadium on the athletic field, and the Board so recommend. The Board were very much gratified in the good results and the high standard and efficiency of athletics in the school, and desire to record their commendation thereof. In the opinion of the Board, some additional laborers should be employed to care properly for the gymnasium.

7. The Board also wish to express their approval of the action of the Navy Department in assigning three battle ships for the use of the summer cruise of the midshipmen, believing that it will conduce much to the better training and seamanship of the midshipmen.

8. It is the opinion of the Board that when an officer shall have shown himself an efficient instructor in the academy, his term of service should not be less than three years.

9. The Board express their concurrence in, and approval of, the recommendations of former boards that midshipmen upon graduation, after the completion of the four years' course at the academy, be commissioned ensigns.

10. The crypt for the final resting place for John Paul Jones has not yet been completed, and the Board express the wish and recommend that appropriate legislation be had to prepare suitably the crypt, so that the remains may be placed therein and removed from the temporary place now occupied. In the opinion of the Board, patriotism demands the completion of the crypt at an early date.

11. In justice to the civilian professors and instructors, who have rendered many years of efficient service to the academy and have grown old in its service, the Board earnestly recommend that suitable provision be made by appropriate legislation to care for them in old age.

To the superintendent, Capt. J. M. Bowyer, U. S. Navy, and his officers, the Board desire to express their thanks for their courtesy and to express their appreciation of their faithful and efficient service to the academy, as shown by its excellent general condition.

The appointment of a permanent secretary to the Board of Visitors is commended, and the Board have found Prof. Paul J. Dashiell's services highly efficient.

The Board appreciate also the valuable service of Lieut. F. H. Poteet, U. S. Navy, appointed by the superintendent as aide to the president of the Board.

Respectfully submitted.

(Signed)

ARTHUR L. BATES, *President.*
 GEO. PEABODY WETMORE,
 S. D. McENERY,
 GEO. A. LOUD,
 L. P. PADGETT,
 EDWARD OSGOOD BROWN,
 THOMAS R. PROCTOR,
 THOMAS P. FISK,
 J. P. MCGOWAN,
 JOHN W. DINSMORE,
 REGINALD H. GRIFFITH,
 M. J. DONNELLY.

The SECRETARY OF THE NAVY,
Navy Department, Washington, D. C.

REPORT OF THE CHIEF OF BUREAU OF YARDS AND DOCKS.

DEPARTMENT OF THE NAVY,
BUREAU OF YARDS AND DOCKS,
Washington, D. C., September 28, 1910.

In obedience to the instructions contained in the department's letter of July 28, 1910, I have the honor to submit a report of the operations of the Bureau of Yards and Docks for the fiscal year ended June 30, 1910.

The expenditures during the year from appropriations under the cognizance of the bureau aggregated \$7,172,736.37, of which the sum of \$4,932,227.32 was for works of improvement for which specific appropriations were made by Congress. The remainder, \$2,240,509.05, was applied to the maintenance and repair of navy-yards and stations under the cognizance of the bureau, for the civil establishment, contingencies, etc., as follows:

The repair and preservation of the yards and stations, covering the outlays upon the real estate and improvements, cost \$642,619.30; their maintenance, covering general operation and outlays for and upon movable property, cost \$1,303,081.24; the classified service cost \$264,881.38; and contingent and other expenditures amounted to \$29,966.05.

During the year 76 contracts were made for public works under the cognizance of the bureau, involving obligations amounting to \$6,178,853.99.

Except at Pearl Harbor, no extensive improvements have been made at the insular stations, and, as noted in previous reports, the bulk of expenditures at such stations has come from the bureau's current appropriations, already insufficient to take care of the general maintenance and repair work at the home navy-yards.

PUBLIC WORKS FOR THE BUREAU OF MEDICINE AND SURGERY.

During the fiscal year the bureau prepared and completed plans and specifications for and supervised the construction of public works for the Bureau of Medicine and Surgery amounting to \$1,271,798.06. It was also engaged in the preparation of plans and specifications for additional public works for that bureau amounting to \$623,450. Various studies and preliminary plans for projected works, estimated to cost approximately \$600,000, were also made, and the construction of works for which plans and specifications were completed prior to the beginning of the fiscal year was supervised, the contract price of which amounted to \$518,254.08. Certain work was also done by day labor, aggregating \$146,500, making a total of \$3,158,502.14.

PUBLIC WORKS FOR THE MARINE CORPS.

Under date of June 22, 1910, the department approved instructions under which the design and construction of public works for the Marine Corps, including repairs and alterations which involve considerations affecting engineering or architectural features, shall be performed under the supervision of this bureau. The quartermaster of the Marine Corps will determine when any particular work is to be undertaken and indicate to the bureau whether it is to be done by contract or by day labor, the limit of cost, and the appropriation to be charged. In case the work is to be done by contract the necessary plans and specifications will be prepared by the bureau for the approval of the quartermaster, who will procure proposals, open bids, and secure the execution of the contract after award is made by the department. In case the work is to be done by day labor, the local civil engineer will furnish the necessary data as to labor and material required, which will be procured under the direction of the quartermaster of the Marine Corps. The local civil engineer is to have supervision of the work, whether done by contract or day labor.

The work of the bureau will be considerably increased under these instructions, and a corresponding increase in the force will be necessary for the expeditious and economical discharge of such additional work.

DRY DOCKS.

Prior to the naval act of June 26, 1906, the largest battle ships for the navy were limited to a maximum trial displacement of 16,000 tons; in that year the appropriation act made possible the construction of a ship of 20,000 tons displacement.

That the rapid increase in size of vessels was unprecedented and liable to outstrip the docking capacity of the navy-yards can readily be understood when it is realized that in a period covering fifteen years, from 1890 to 1905, the average yearly increase in tonnage of individual vessels did not exceed 4 per cent, whereas in the three years from 1906 to 1909 the average yearly increase was nearly 20 per cent.

The docking facilities on July 1, 1906, had just been increased by the completion of a dry dock at the navy-yard, Portsmouth, N. H., and one at the navy-yard, Boston, Mass. The dry dock at Philadelphia, Pa., was nearing completion, and the one at Mare Island, Cal., was practically being commenced over again by the second contractor, to whom the work was let after the Government had been forced to cancel the original contract. These four docks were those originally authorized by the act of March 4, 1898, as timber docks. The docks authorized at later dates, the one at the navy-yard, Charleston, S. C., and the one at Norfolk, Va., were progressing satisfactorily. The new dock for New York had been contracted for a few months previously, and it was seen that the contractor would have difficulty with the treacherous soil at the site.

At the stations outside the continental limits of the United States there was no government dock available. At the Guantanamo Station work had been started on the excavation of the dock site to the extent of the funds available. At the Asiatic Station the floating dry dock Dewey arrived at Olongapo, P. I., a few days

after July 1, 1906, becoming then the only dock possessed by the Government outside the United States proper.

The above-mentioned docks were appropriated for during a period when the growth in tonnage of the heaviest type of vessels was very gradual, and it was therefore seen that the great augmentation in tonnage of the battle ships, following the act of June 29, 1906, would shortly necessitate much larger docks than any at that time available or under construction. The situation so far has been partially met by enlarging dry dock No. 4, New York, to a size limited by the space available at the site; the extension of dry dock No. 3, at Norfolk; and the authorization by Congress of additional funds to permit the new dry dock No. 2, at Puget Sound, and the new dry dock No. 1, at Pearl Harbor, to be constructed with increased dimensions over those originally provided in the contract.

During the past fiscal year, of the dry docks under construction the one at the navy-yard, Mare Island, Cal., was completed, and accepted on May 14, 1910, after a test conducted by a board of officers. The U. S. S. *South Dakota* was the first large vessel to use the new dock.

The construction of this dock has been attended with many vicissitudes. It was originally appropriated for as a timber dry dock, but was changed after the contract was let to a masonry structure. The first contractor failed to make satisfactory progress, while the second contractor failed financially, and the work was finally completed by the receiver for the latter contractor.

At the New York yard, the second contractor having made no progress toward the construction of the dock, the contract was canceled by the department October 2, 1909. Following a competition, limited to a number of firms of recognized engineering ability and financial capacity, the contract was again placed on November 12, 1909, for the completion of the dock, for the sum of \$1,389,000, subject to a proviso that the work should be carried on under a cost plus 10 per cent agreement until funds should be available for carrying out the lump-sum contract. To overcome the difficulties encountered by previous contractors in establishing the foundations of the dock, the plan of sinking individual piers by the pneumatic caisson process was adopted. To anticipate the increase in the limit of cost provided by the naval act of June 24, 1910, the work was prosecuted in such a manner to permit the lengthening of the dock to 700 feet, increasing the width of entrance to 110 feet, and the depth over the sill to 35 feet below mean high water. At the close of the fiscal year a board of civil engineer officers was in session to determine the changes necessary in the contract in an endeavor to cover the enlarged dock by one lump-sum contract within the limits of the appropriation. The work under the new contract has made satisfactory progress.

At the navy-yard, Puget Sound, Wash., the contractor for the new dry dock No. 2 had nearly completed the excavation of the site by the first of the calendar year, and would have proceeded with the concrete work, but was instructed to delay further prosecution of the work until the department could ascertain if Congress would increase the limit of cost of the dock in order to provide for the larger dock recommended. This was provided for in the naval appropriation act of June 24, 1910, which increased the limit of cost to

\$2,300,000. Meanwhile a board of civil engineer officers had determined the increase in contract price for widening and lengthening the dock, so that the supplemental agreement was forwarded to the contractor for execution immediately after the passage of the naval act. The contract time for the completion of the dock is March 2, 1912.

The contract for the dry dock at the naval station, Pearl Harbor, Hawaii, was signed July 22, 1909. The work so far accomplished consists of excavation of the site by dredging and the assembling of the contractor's plant. The department having decided to ask Congress for an increase in the limit of cost for the Pearl Harbor dry dock, in order to increase both the width and length of the proposed structure, the change in contract price was determined upon and the supplemental agreement and all the plans were ready for execution on the passage of the appropriation act. The dock is due to be completed by November 22, 1912.

The extension of dry dock No. 3, Norfolk Navy-Yard, was provided for under the naval act of June 24, 1910, and on June 29, 1910, proposals were advertised for the extension of the dock by contract. The contract was made with W. L. Miller, of Boston, Mass., for \$533,784; the date of this contract is August 6, 1910, and completion is due November 6, 1911.

On the completion of the foregoing dry docks, there will be available for docking vessels of the U. S. S. *Wyoming* class, the following docks: New York No. 4, Norfolk No. 3, Puget Sound No. 2, and Pearl Harbor No. 1. The provisions made at the last session of Congress for the increase in size of the dry docks under construction at New York, Puget Sound, and Pearl Harbor, and the lengthening of the dry dock at Norfolk, will materially improve the docking capacity of those yards.

The bureau at this time has not submitted estimates for any additional large dry docks on account of the injunction from the department to keep down the estimates for public works as much as possible.

It is to be noted, however, that it will be some time before the larger docks now under construction will be available, and experience goes to show that a longer period should be allowed for the construction of a dry dock than is required for the building of the largest vessel that it will accommodate.

CENTRAL POWER PLANTS.

In so far as the equipment forming a part of the central power plant is concerned, this has all been completed and is in working order at the navy-yards, Portsmouth, N. H., Boston, Mass., Philadelphia, Pa., Norfolk, Va., and Charleston, S. C. All of the new equipment necessary for the central power plant at New York has been purchased and installed except that going in locations formerly occupied by equipment that had to be retained until the new equipment was in operation. This is all under contract and the foundations are practically completed, so that the entire plant will be ready for operation by April 1, 1911. The central power plant at the navy-yard, Puget Sound, will be completed and ready for operation by July 1, 1911. The units have all been installed and the remaining work necessary is only that relating to the piping and con-

densing system. The completion of the central power plant at Mare Island has been delayed, owing to the fact that the site originally selected by the bureau was not the one finally determined upon, which change required a great deal more time and the expenditure of about \$50,000 additional. The results obtained from the centralization of power in one plant indicate that there is as much saving in operating expense as was estimated by the bureau at the time consolidation was recommended. There still remains considerable work at all of the navy-yards in arrangement of transmission systems, which, however, can only be done from time to time on account of the fact that the yard operation must not be interfered with.

The floating dock *Dewey* at the naval station, Olongapo, P. I., sank at its moorings in the early morning on May 24, 1910, until the port side, containing the main boilers and pumping machinery, was submerged. On June 29, 1910, the bureau was advised by cable that the dock had been raised and funds for the necessary self-docking and repairs were immediately allotted from the special appropriation of \$50,000 granted for this purpose by Congress.

No large fires occurred at any of the navy-yards and stations during the fiscal year. Earthquake shocks that did no damage were recorded at Mare Island, Cal., Olongapo, P. I., and Guam. The floating crane *Hercules* was torn from its moorings at the navy-yard, New York, during a high wind on June 18, 1910, and wrecked on the quay wall, the greater part of the superstructure being a total loss. The yards were singularly free from loss of life by accident.

REPAIRS AND PRESERVATION.

The expenditures under this appropriation during the fiscal year at the various navy-yards and stations were for general repairs to and preservation of the dry docks, buildings, sea walls, wharves, officers' quarters, and other public improvements. The many new structures built and placed in commission within a few years after the Spanish war are now beginning to require more or less extensive repairs and the bureau has consequently been greatly embarrassed in providing the funds called for by the commandants for objects regarded by them as imperative for a proper conservation of the government property.

MAINTENANCE.

The expenditures from this appropriation were for the general running expenses of the various navy-yards and stations, including the operation of power plants, purchase of fuel and water, heating and lighting of buildings, care and cleaning of streets, purchase of furniture, pay of watchmen, pay of employees on leave, pay of classified employees, and similar expenses. As was the case with appropriation "Repairs and preservation," there has been considerable embarrassment in providing sufficient funds under this appropriation to meet the calls of the various navy-yards and stations, and the bureau has been compelled to disapprove various requisitions and requests for objects which appeared to be desirable for the expeditious conduct of public business. The various indirect charges placed against this appropriation were a severe drain.

CONTINGENT.

The expenditures from this appropriation were for contingencies arising during the year, the principal items being the raising of the dry dock *Dewey* at Olongapo, repairs to buildings damaged by fire at Norfolk, repairs to a wharf damaged by collision at Norfolk, stopping leaks in the pump-well of dry dock No. 3, Norfolk, repairs of damage caused by storm at Key West, stopping leaks at the site of dry dock No. 4, New York, and repairs to damaged buildings at New Orleans.

OPERATIONS AND EXPENDITURES.

The operations and expenditures at each navy-yard and station are given in detail under their respective heads.

NAVY-YARD, BOSTON, MASS.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$187,094. 42
Repairs and preservation.....	31,253. 37
Maintenance.....	128,027. 16
Total.....	<u>346,374. 95</u>

YARD IMPROVEMENTS.

No works of improvement have been completed during the year in the sense that an appropriation has been wholly expended.

Wire-rope mill, for equipment, act April 27, 1904.—Plans and specifications were prepared during the fiscal year, contract awarded and work about 14 per cent completed on June 30.

Oil storehouse, act March 3, 1905.—Contract for this building was awarded and building completed before the close of the fiscal year. Drains were laid around the building by yard labor. It is proposed to expend the small unobligated balance on minor improvements.

Power house, extensions, act June 29, 1906.—An addition to the monitor over the power house was constructed, railroad track extended through the boiler room, concrete floor laid in boiler room and cast-iron plate in engine room. A plan was prepared for completing the floor of the engine room, but the work has not yet been undertaken.

Paving, to continue, act March 2, 1907.—Brick pavement was laid on concrete base on north and south side of building No. 107, on Third and Fourth avenues, extending on Third avenue up to Ninth street. A concrete walk was laid on the northwest side of Second avenue from building No. 31 to the upper quarters. Some minor paving work was also done in the vicinity of buildings Nos. 63 and 117 and at other points.

Salt-water flushing for dry dock No. 2, act March 2, 1907.—A contract for this work was awarded and completed during the fiscal year. It is proposed to expend the small remaining balance on minor improvements to this system.

Railroad system, extensions, act May 13, 1908.—A small amount was expended on extensions of track to the power house, to the dump, pier No. 5, and other points.

Track for traveling crane, act March 3, 1905.—Plans were prepared and contract awarded for additional rail around dry dock No. 2. At the close of the fiscal year this work was just started. It is proposed to expend the remainder of this appropriation on paving between rails of crane track, and this work was being advertised at the close of the fiscal year.

Refuse kiln, act June 29, 1906.—Plans and specifications were prepared and contract awarded.

Improving ropewalk building, act March 2, 1907.—Plans and specifications were prepared, contract awarded, and work under contract completed during the fiscal year. New plumbing was installed by yard labor. It is proposed to expend the small remaining balance on necessary improvements.

Railroad rolling stock, act May 13, 1908.—Expenditures were for new flat cars. A contract was awarded for dump cars which will obligate nearly the whole of the remaining balance.

Underground conduit, act May 13, 1908.—Short sections of pipe and electrical conduit have been constructed by yard labor. A contract is being advertised for electrical conduit work for arc circuits and other wires which, with the exception of the electrical material, will obligate the remaining balance.

Power plant, to complete, act March 3, 1909.—Contract for steam and water piping was awarded and practically completed during the year. A 5,000-foot air compressor was installed and is now running satisfactorily, although not finally accepted. Contract has been awarded for a 1,500-kilowatt turbo-generator and another contract for the necessary condensing equipment. Work on substations in buildings Nos. 42 and 105 was completed. An addition to the switchboard in building No. 108 was practically completed. New live-steam and exhaust heaters were installed in central power plant and the hot-water heating system connected to the same. Hot-water heating was installed in buildings Nos. 36 and 77 and the installation of hot-water heating in buildings Nos. 42 and 125 was begun.

Dredging, act March 3, 1909.—A contract was awarded and completed during the year for dredging on the northeast side of pier No. 4.

Sewer-system extensions, act March 3, 1909.—Plans and specifications were prepared and contract awarded for sewer in Ninth street and Fifth avenue. This work has not been commenced.

Improvements to water front, act March 3, 1909.—Contract was awarded for new deck for pier No. 8 and for the extension inland of pier No. 3, including necessary dredging and wharf between piers Nos. 3 and 4. This work was completed during the fiscal year.

Ropewalk fire protection, act March 3, 1909.—Plans and specifications were prepared and contract awarded for sprinkler system in buildings Nos. 58, 60, and 62. This work has not yet been commenced. It is proposed to expend the remainder of this appropriation in additional sprinkler equipment for above buildings, and plans and specifications have been prepared.

NAVAL STATION, CAVITE, P. I.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvement.....	\$10,875.09
Repairs and preservation.....	29,846.06
Maintenance.....	43,325.32
Contingent.....	6,260.07
Total.....	90,306.54

YARD IMPROVEMENTS.

Improvements to central wharf, act May 13, 1908.—Expenditure was made for the renewal of piles, stringers, joists, and decking. A shelter remains to be erected on the wharf.

Improvements to buildings Nos. 1, 2, 3, 4, and H, act May 13, 1908.—Expenditures were made for the renewal of the fronts and columns of these buildings, painting, etc.

Improvements to building No. 29, act May 13, 1908.—Expenditures were made for monitors, crane supports, renewal of roof, and gutters where necessary.

Lumber shed in court of building No. 84, act May 13, 1908.—Expenditure was made for plans, etc. Work on this shed will be started at an early date and completed about August 30, 1910.

Improvements to building No. 23, act May 13, 1908.—Expenditure was made for renewal of corrugated iron on roof, gutters, and down spouts.

Improvements to No. 1 ways, act May 13, 1908.—Expenditure was made for improving supports of draft, chain, tackle, etc.

Improvements to building No. 83, act May 13, 1908.—Expenditure was for completing improvements contemplated for roof and sides of building. It is proposed to improve floor with the balance of appropriation.

Railroad system extension, act May 13, 1908.—Expenditure was made for tracks and sleepers, and installation. A considerable amount of this appropriation was used to strengthen sea wall at Guadalupe to carry track.

Improvements to building No. 25, act March 3, 1909.—Expenditure was made for improving floor in this building. Work on this building has been held up; under present condition it is not urgently needed for machine shop, as originally contemplated.

NAVY-YARD, CHARLESTON, S. C.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$142,065.55
Repairs and preservation.....	17,332.35
Maintenance.....	81,258.05
Contingent.....	508.22
Total.....	241,164.17

YARD IMPROVEMENTS.

Workshop, to complete, act April 27, 1904.—Additional offices now occupied by the Engineer Officer were constructed under this subhead.

Machinery for yards and docks power house, act March 3, 1905.—The generator sets, contract No. 1240, with the General Electric Company, were tested and accepted and final payments made.

Water system, extensions, act June 29, 1906.—Five hydrants and water connections were provided for the torpedo boat piers and for the repair wharf.

Foundry and copper shop, to complete, act June 29, 1906.—Concrete floors in the north end of building No. 9 were installed under this appropriation. A wood block floor was provided in a part of the east-wing of building No. 9, now used as a workshop for the Reserve Torpedo Flotilla.

Stone and concrete dry dock, to complete, act March 2, 1907.—Pumping machinery under contract was completely tested and accepted and final payments made.

Experimental types of stair rails were installed in the dock.

Sewer system, extension, act May 13, 1908.—Sewer from the main gate connecting with a branch sewer on Avenue B was completed under contract No. 1395.

Heating system, extension, act May 13, 1908.—Heating systems were installed in buildings 16, 18, and 19, and buildings 7 and 19 were connected to the heating main.

Completing power plant, act May 13, 1908.—Coal-handling apparatus under contract No. 1351 was completed during the year. The ash-handling apparatus in connection with the boilers of the Central power plant, contract No. 1347, was completed. Final payments on the power house building, contract No. 1244, which were held up pending decision in liquidated damages to be exacted by reason of delay in completion, were made.

Elevator and interior fittings, Building No. 7, act May 13, 1908.—Two freight elevators were installed in this building, and some shelving erected for stores.

Paving and grading, to continue, act March 3, 1909.—Contract for paving on Avenue C and Fourth street was completed.

Pneumatic system, extension, act March 3, 1909.—Pneumatic pipe lines connecting with repair wharf, torpedo boat piers, and the bottom of the dry dock were installed under contract No. 1405.

Dredging, to continue, act March 3, 1909.—A deep entrance to the dry dock was dredged out.

Shipfitters' shop for construction and repair, to complete, act July 1, 1902.—Numerous small jobs were done under this subhead, the largest being the installation of crane runway. Some additional plumbing work was done in the building.

Foundry for construction and repair, to complete, act April 27, 1904.—Alterations in plumbing and a number of minor improvements were made in the building as requested from time to time by the Construction Officer.

Storehouse and storekeepers' office, to complete, act April 27, 1904.—Window guards were installed in the building, and some other minor improvements made.

Fire protection system, act March 3, 1905.—Fire protection systems were installed in buildings 2, 3, 5, 6, 7, 8, and 9.

Interior fittings, machine shop for construction and repair, act June 29, 1906.—A galvanizing shop was completed in this building.

Interior fittings, equipment building, act June 29, 1906.—Additional shelving was installed in this building; the lighting system had to be rearranged; the office of the paymaster of the Reserve Torpedo Flotilla was screened, and other minor improvements made in the building.

Dry dock latrines, act June 29, 1906.—Lighting, masonry work, and carpentry work was done on the small latrine at the south side of the dry dock.

Dredging, to continue, act March 3, 1909.—Contract No. 1290. This work was entirely completed during the previous fiscal year, the adjustment of accounts made during this year, and a small balance remains.

Railroad equipment, act March 2, 1907.—A number of old cars were converted into dump cars and other minor improvements made to the rolling stock of yards and docks.

Electric system, extension, act March 2, 1907.—The erection of aerial lines to the water front to provide charging current for the batteries of submarines and for ship lighting, comprised the principal expenditures. Transformers were installed in building No. 2, and some work in connection with yard lighting was done.

Clearing yard, act May 13, 1908.—A great number of dead trees and a large quantity of brush was removed from the park section of the yard, the hollows in a number of trees filled up and some new lawns built.

Underground conduit system, act March 3, 1909.—No expenditures under this subhead were made during the past fiscal year.

Intercepting drain, act March 3, 1909.—Preliminary borings and foundation tests were made on the site of the new intercepting drain now building.

Increasing and improving torpedo-boat slips, act March 3, 1909.—Contract No. 1426: This has been let to Simons-Mayrant Company of Charleston, and includes additional torpedo-boat piers and a coaling pier. The work is in progress. Purchase of track materials and the extension of the railroad track to the torpedo-boat piers was done under this subhead.

NAVAL STATION, CULEBRA, P. R.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$3,617.42
Repairs and preservation.....	503.62
Maintenance.....	2,369.93
Total.....	6,490.97

YARD IMPROVEMENTS.

The cold-storage plant, act May 13, 1908.—This was completed during the fiscal year 1910, started operation August 10, 1909, and has since been operating successfully.

Clearing and cleaning station, act May 13, 1908.—This work is being carried on as is most expedient.

Fencing, act May 2, 1907.—This appropriation is being used as material for fencing is needed.

Improvements water system, act May 13, 1908.—Work will be carried on under this appropriation during the coming fiscal year in improving the cisterns and water sheds at this station.

Sewer system and fire-protection system, act May 13, 1908.—No work was done under these appropriations during the past fiscal year. It is intended to carry out same during the fiscal year 1911. Estimates and plans have been forwarded to the bureau.

NAVAL STATION, ISLAND OF GUAM.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$39,186.05
Repairs and preservation.....	16,436.28
Maintenance.....	41,025.92
Contingent.....	377.96
Total.....	97,026.21

YARD IMPROVEMENTS.

General storehouse, act March 3, 1903.—Work was suspended temporarily during the fiscal year 1908, and nothing has been done during the present year pending settlement of the difference between the supplies and accounts charges and those of this station.

Fire-protection system, act May 13, 1908.—A portion of the piping in the town of Agana has been charged to this item. This work is progressing in conjunction with the water-supply system.

Extension of telephone system, act May 13, 1908.—Nothing has been done under this item.

Dredging, act March 3, 1909.—The expenditures under this item have been for the purchase of cable to complete the machinery of the dredger, for completing the installation of same on lighter and building house over the machinery, for two anchors, and the necessary repairs due to operation of the dredger. The dredger has been run continuously since November 20, 1909, except for minor repairs. It has been efficient in handling coral rock as well as sand. It has not been necessary to do any blasting of rock to date. About 5,600 cubic yards of material were removed by the dredger during the fiscal year.

Extension of naval station roads, act March 3, 1909.—No work has been done on the extension of roads on account of the large number of laborers required on the water-supply system.

Water-supply system, act March 3, 1909.—The distributing reservoir and the pipe line from the dam to Agana are complete, the total length being about 10,500 feet; about 10,200 feet of pipe have been laid in Agana. The delay on this work was caused by lack of material. Practically all of the material was received by the first of May. All of the material for the dam has been hauled to the site overland. About 20 per cent of the concrete work on the dam has been completed.

NAVAL STATION, GUANTANAMO, CUBA.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$2,412.68
Repairs and preservation.....	2,920.16
Maintenance.....	10,411.32
Total.....	15,744.16

YARD IMPROVEMENTS.

Dredging Toro Cay, act April 27, 1904.—The expenditure under this head was for dredging in front of the coal dock at Hospital Cay.

Clearing and grading, act April 27, 1904.—The expenditure under this appropriation was for grading and repairs to yard roads. The amounts allotted were exhausted during February, 1910.

Roofing buildings, acts March 3, 1903, and February 18, 1904.—The amount expended under this appropriation was for repairs to roof of native hospital.

Reservoir and water system, act April 27, 1904.—No work was done under this appropriation during the fiscal year.

Dry dock, act April 27, 1904.—No work was done under this appropriation during the fiscal year.

NAVAL STATION, HAWAII.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvement.....	\$989,702.11
Repairs and preservation.....	9,399.00
Maintenance.....	31,233.55
Total.....	1,030,334.66

YARD IMPROVEMENTS.

Reclamation of reef, act June 29, 1906.—No work has been done under this appropriation and no obligations incurred. This money was reappropriated for general yard development of Pearl Harbor.

Toward dredging entrance channel, act March 3, 1909.—Work was prosecuted by the Hawaiian Dredging Company under contract of December 23, 1908, using two to three dredges. At the beginning of the fiscal year, 524,815 cubic yards had been removed. At the end of the fiscal year, 1,511,116 cubic yards had been removed on sections 1, 2, 3, 5, 6, 7, 8, and 9. Of these sections 5, 7, 8, and 9 were practically completed except "sweeping."

Toward construction of dry dock, act March 3, 1909.—Contract No. 1381 for 620-foot dry dock was signed July 22, 1909, with the San Francisco Bridge Company. Excavation was started October 1, 1909, and 103,453 cubic yards of material removed. The contractor erected a large part of his temporary plant.

Toward erecting machine shops, act May 13, 1908.—No work has been done under this appropriation.

Storehouses, act May 13, 1908.—No work has been done under this appropriation.

Toward yard development, act March 3, 1909.—Topographic survey of main station at Pearl Harbor, including Kuahua Island, was practically completed and plotted. Plans for general layout were prepared. Railroad materials were purchased. As no definite layout of the station has been approved, it is impossible to take definite steps toward general development.

NAVAL STATION, KEY WEST, FLA.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$134,499.68
Repairs and preservation.....	7,913.24
Maintenance.....	24,894.05
Contingent.....	2,939.24
Total	170,246.21

YARD IMPROVEMENTS.

Latrines, act March 3, 1909.—Contract No. 1386, for the construction of the latrines was entered into with Ferguson & Ward, local contractors, September 13, 1909. They were both completed in May, 1910. Their use has tended much to an excellent sanitary condition of the station and also, by their convenient approach from every direction, to a decrease in the cost of work.

Storehouse for supplies and accounts, act March 3, 1901.—Contract 1348 was entered into with the Penn Bridge Company under date of January 25, 1909, and the building was turned over practically completed June 30, 1910. The new storehouse is well adapted to its proposed use, but requires an elevator, racks, shelving, and partitions, at an estimated cost of \$15,000, to fit its interior for the most convenient, rapid, and secure receipt and storage of materials.

Dredging and filling in, act March 2, 1907.—Work under contract No. 1319, with Howard Trumbo, about 90 per cent completed in the fiscal year 1910 and finished early in the last fiscal year, including the building of a dike approximately parallel to and about 250 feet from the old concrete wall bounding the southern part of the station on its west side, and the filling in of the area thus separated from the open water. The result is the addition of 5 acres of very valuable land to the station and the deepening of the water in front of this new fill to approximately 20 feet, so that when protected by a substantial quay wall the new water front of over 1,000 feet will be available for use by vessels. Incidental to the diking and dredging was the building of a slip in which and in front of which will be constructed the marine railway already under contract.

Coaling plant, extension and improvement, act March 3, 1903.—Under this appropriation work is being done under contract No. 1326, dated August 29, 1908, with the Penn Bridge Company in the construction of a quay wall, pier, and coal shed. Progress has been retarded by unexpected difficulties encountered in the under-water work incident to the quay wall and coal shed foundations, which, however, are all in place as a result of the year's work. A part of the old pier has been torn up and piles driven for the foundations of the new pier.

Water system, extensions, act March 2, 1907.—The small expenditures noted were for the extension of the yard system of fresh-water mains across the fill on line of B street, and for connections with storehouse for supplies and accounts, building No. 48, and with the reinforced concrete cistern under construction.

Concrete cistern, act March 3, 1907.—Contract No. 1404 was entered into with Bryan & Co. on December 9, 1909, for the construction of a reinforced concrete cistern 80 feet in diameter by 40 feet high, to contain 1,500,000 gallons. Work began very promptly, and the close of the fiscal year found the walls of the cistern about half height. The cistern is to be covered with a galvanized corrugated steel roof, with steel frame. The storage capacity of the station will be increased nearly 1.9 times by this improvement.

Marine railway, act March 3, 1909.—A contract, No. 1421, dated February 24, 1910, has been entered into with the New Jersey Foundry and Machinery Company for the construction of this improvement, and preliminary work had already begun at the station before the close of the fiscal year.

NAVY-YARD, MARE ISLAND, CAL.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$578,911.52
Repairs and preservation.....	55,526.71
Maintenance.....	160,585.34
Contingent.....	300.00
Total.....	795,323.57

YARD IMPROVEMENTS.

Shipwright shop, construction and repair, act March 3, 1897, and deficiency bill, February 25, 1910.—This appropriation reverted to the Treasury, but was reappropriated by the deficiency bill signed February 25, 1910. Work was immediately commenced by yard labor on the following: Making an inventory of all material originally purchased for the work; completing foundations; carpentry work; erection of steel members; sheathing sides and roof with galvanized iron; filling in around the building, etc. The early completion of this building is expected, 70 per cent of the work having been completed.

Quay wall, extension, act of May 13, 1908.—The total expenditure of the remaining balance under this appropriation was effected in extending the quay wall south of the entrance of dry dock No. 2, which was performed by contract with the Scofield Construction Company in connection with their contract for the construction of dry dock No. 2.

Improvements to building No. 69, act March 3, 1909.—The principal expenditures under this appropriation were for fitting up an office on the first floor; fitting up two existing rooms on second floor as toilet rooms, with necessary plumbing fixtures and connecting the same to the sewer in the basement; making and setting sash door in an existing partition, with frame and hardware complete; erecting two monitors; removing an old wooden and translucent skylight and

replacing the same with skylights made of galvanized iron and glazed with ribbed skylight glass.

Electric plant system, extension, act March 2, 1907.—The small balance remaining under this appropriation was expended for labor and material in replacing wooden poles and overhead lines on Central avenue and Walnut street by iron posts and with wires in the present gas mains.

Dry dock water-closet and bathhouse, to complete, acts July 1, 1902, and April 27, 1904.—No expenditures were made under this appropriation during the year, work having been held up pending the completion of dry dock No. 2. The original plans have been modified and authority has been requested to construct this building by yard labor. Seventeen per cent of the appropriation has been expended in equipping temporary building with fixtures, which will be moved to the new building upon completion.

Channel moorings, Mare Island Straits, act March 2, 1907.—Expenditure under this appropriation during the year was for construction of four mooring buoys for the coal barges, and the rebuilding of buoys Nos. 7, 8, 13, and 14.

Electric capstans for Dry Dock No. 1, act March 2, 1907.—This appropriation provides for three electric capstans for dry dock No. 1 to replace the present steam capstans. Contract for the delivery and installation thereof was let to the Hyde Windlass Company, of Bath, Me.

Grading and paving, extensions, act May 13, 1908.—The expenditures under this appropriation during the year were for yard labor for paving and grading Dock street, south of dry dock No. 2, between buildings Nos. 36 and 52, and between the blacksmith and machine shops.

Dredging, act May 13, 1908.—The principal expenditure under this appropriation during the year was that in connection with the construction of dry dock No. 2 under contract with the Scofield Construction Company. A small amount was expended for yard labor in dredging along the quay wall to a depth of 27 feet, mean low water, and in front of the entrance to dry dock No. 1. The small balance will be expended in dredging along the quay wall. Ninety-nine per cent of this appropriation has been expended.

Central power plant, to complete, acts March 2, 1907, May 13, 1908, and March 3, 1909.—The principal expenditure under this appropriation has been that portion in connection with the construction of dry dock No. 2 under contract with the Scofield Construction Company; the yard expenditures have been for the excavation of the site and the building of foundations; the excavation is practically complete and the work on the foundations commenced; the contractors for the structural steel work have placed their order and it is expected that the work will be rapidly pushed forward as soon as the foundation work is completed.

New elevators in buildings 69 and 71, act March 3, 1909.—The principal expenditure under this appropriation was for two electric freight elevators in building No. 71, which were installed by the Otis Elevator Company.

Sewer system, extensions, act March 3, 1909.—Expenditures under this appropriation were for yard labor in connection with changes and extension of the sewer system near the U. S. S. *Independence*, and for

laying 350 feet of 12-inch terra-cotta sewer from the north corner of the boat shop to the joiner shop. Preparation for the complete plans of the sewer system have been suspended pending the completion of the filling in around dry dock No. 2.

Repairs to building No. 116, act March 3, 1909.—There has been no expenditure under this appropriation, the work having been held up pending the convenience of the machinery division.

Crane track, extension, act March 3, 1909.—The principal expenditures under this appropriation have been with the Scofield Construction Company, under contract No. 1172, in connection with the construction of dry dock No. 2.

To continue improvement of channel, acts April 27, 1904, March 3, 1905, June 29, 1906, May 13, 1908, and March 3, 1909.—The principal expenditure under this appropriation during the year was the extension of two dikes, Nos. 12 and 14—No. 12, 1,000 feet, and No. 14, 500 feet—the work being performed under contract with the Thompson Bridge Company. Considerable work was performed by yard labor moving the U. S. S. *Independence*, pulling and driving new piles, caring for material, cutting and sawing material, surveys and soundings. Ninety-seven per cent of this appropriation has been expended.

Ordnance storehouse, act March 3, 1909.—Contract No. 1440, dated June 24, 1910, has been made with the W. N. Concanon Company for the erection of the building.

Railroad system, extension, act March 3, 1909.—The principal expenditure under this appropriation during the year was for extending the system into buildings Nos. 152, 155, 163, 141, and 143, and rebuilding the main line in front of these buildings, all consisting of concrete and steel tie construction. This work was performed under contract with the American Construction Company.

NAVAL STATION, NARRAGANSETT BAY, RHODE ISLAND.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$3,096.34
Repairs and preservation.....	4,819.57
Maintenance.....	6,605.26
Total.....	14,521.17

YARD IMPROVEMENTS.

Steel floats, fences, dredging, and general improvements, act March 2, 1907.—At the beginning of the year the steel floats under contract No. 1323, August 17, 1908, were practically complete. Payment was made in the early part of the year. Loam and trees were purchased and placed and grounds rolled. The remainder of the appropriation will be used for concrete walks, improvement of grounds, etc.

NAVAL STATION, NEW LONDON, CONN.

The expenditures during the fiscal year for labor and material were, for maintenance, \$2,420.50.

The only expenditure at this station was for watchmen and laborers engaged in cleaning up and caring for the property.

NAVAL STATION, NEW ORLEANS, LA.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$55,677.08
Repairs and preservation.....	8,892.41
Maintenance.....	38,233.87
Contingent.....	996.99
Total.....	103,800.35

YARD IMPROVEMENTS.

Coal-storage plant, act March 3, 1901.—This appropriation was closed by final voucher in favor of the Hoshor-Platt Company, 130 Liberty street, New York, under their contract, 1197, of August 14, 1905, and the balance turned into the Treasury.

Paving, act March 2, 1907.—The balance under this appropriation was used for paving walks from the sidewalk on Sixth street to each of the four officers' quarters.

Shops for steam engineering, act April 27, 1904.—The amount expended under this appropriation was for lighting the steam engineering shops.

Central electric-light and power plant, extension, act March 2, 1907.—The expenditure under this appropriation during the year was for the following work:

Street lighting; electric-light wiring on the floating dock; installation of 50-kilowatt generator set; renewing electric cable in power house, building No. 2.

Railroad system, act March 2, 1907.—The amount expended under this appropriation was for reballasting railroad tracks on the station.

Water system, extension, act March 3, 1907.—The expenditures under this appropriation were as follows: Purchase and installation of individual water filters; additional elevated and sedimentation tanks.

Drainage system, act May 13, 1908.—The amount expended under this appropriation was for concrete drainage canals on avenues F and H.

Fitting up yard buildings Nos. 8 and 16, act March 2, 1907.—The amount expended under this appropriation was for installing lights in building No. 16, this building having never been equipped with electric lights.

Improvements to river front, act May 13, 1908.—The amount expended under this appropriation was used for completing the work of widening the levee between the east and west approaches.

Levee improvement and grading, act March 3, 1909.—The amount expended under this appropriation was for the following work:

Widening the crown and base of levee east of east approach; purchasing material with which to lay temporary tracks in connection with filling in on the station; widening levee for 1,400 feet west of the coaling plant; changing slope of levee 850 feet west of west approach and widening crown of levee 200 feet east of the western boundary of the station; filling low places on station to avoid breeding places for mosquitoes; filling low marshy ground north and west of the power house, building No. 2, and similar ground west of building No. 4 and

east of avenue C, and also in the square between avenues D and E and Third and Fourth streets; filling square bounded by avenues C and D and Second and Fourth streets; filling square bounded by avenues D and E and Second and Fourth streets.

NAVY-YARD, NEW YORK, N. Y.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$1,053,728.73
Repairs and preservation.....	142,867.25
Maintenance.....	239,484.92
Contingent.....	5,686.75
Total.....	1,441,728.73

YARD IMPROVEMENTS.

Auxiliary hoist for 100-ton crane, act March 3, 1905.—This auxiliary hoist, capacity 15 tons, installed in order to secure greater speed in lifting small loads, gave some trouble after its installation and the final test and acceptance was therefore delayed. The contract was completed during the year and the auxiliary hoist was in satisfactory operation until the *Hercules* was wrecked.

Railroad system extension, act May 13, 1908.—During the fiscal year some new track has been laid and some old track has been relaid. An extension from the corner of Fifteenth street and Morris avenue over the coal hopper at building No. 41 and connecting to the tracks on Fifth street near building No. 112 was installed and the old track and trestle to the old coal bins removed. The track on the cob dock from the new cut through to Whitney Basin around to the toe of the dock has been removed.

Repairs to roofs of buildings, act May 13, 1908.—The major part of this fund was spent during the preceding fiscal year, and during the last year the small remaining balance was used for minor repairs to various roofs, gutters, and leaders, completing the work of the previous year.

Extending chemical laboratory, act May 13, 1908.—The increase of work done by the chemical laboratory of the yard required increased space. This was most easily met by building a two-story brick extension about 15 by 30 feet at one side of the old building. This portion was completed and occupied by the chemist previous to the fire which destroyed the interior of the main building. This extension is fitted with office, toilet, and dark room on the first floor, and balance and test room on the second floor.

Construct roof of power house, building No. 41, act May 13, 1908.—A new roof was badly needed on the power plant, building No. 41. The old roof, without skylights, leaked, and there was much condensation on its underside, while the interior of the building was dark. The old trusses were reinforced, new purlins and a new roof of ferro-inclave covered with plastic slate installed. Monitors along the central ridge, and a large part of the length of each end ridge were erected, with fixed paradigm skylight in the roof and the swing sashes in sides. This renders the building very light, and as the swing

sashes can be operated in groups from the floor, ventilation, and hence the avoidance of condensation, are secured. This work was commenced and completed during the fiscal year.

Medical supply depot, Naval Hospital.—The construction of this building was undertaken in order to supply more room for storage. This building is of brick, two stories high. Considerable delay was caused after starting the work by the necessity of building different foundations owing to the nature of the soil. Other delay was caused by extending the contract to cross certain paving and grading work not contemplated under the original contract. The work is now completed and the building in use.

Remodel female nurses' quarters, Naval Hospital.—The recent addition to the naval hospital staff of a corps of female nurses rendered necessary the arrangement of proper quarters for them. The old contagious-ward building was selected, and the whole interior of the building was renewed and arranged to provide the desired quarters. The work was considerably delayed during its progress by various minor causes, but was finally satisfactorily completed. Before the work was completed it was realized that the quarters thus provided were inadequate, and the building is now being enlarged.

Granite and concrete dry dock No. 4, act March 3, 1909.—The second contractors, the Williams Engineering and Contracting Company, withdrew all workmen, except enough men to man pumps, about September 1, and having made no further effort to carry on the construction of the dock, their contract was canceled by the department October 2. The pumps were manned by yard labor until November 15. On November 12 a contract was awarded to the Holbrook, Cabot & Rollins Corporation to complete the dock for the sum of \$1,389,000. The contractors assumed possession of the site November 15, and immediately began to remove the cableway and such other plant and temporary work already in place as was useless in prosecuting their plan for building the dock, which consisted of the construction of a continuous concrete dam around the dock, placed by the pneumatic caisson process, and the construction of the floor within this dam. The department availed itself of the opportunity offered by the method of construction to change the massive concrete floor supported on wooden piles to a reinforced concrete floor supported by this concrete dam and by a row of concrete piers sunk along the center line of the dock by the pneumatic process.

Further changes were made in March—lengthening the dock to 700 feet, increasing the width of entrance to 110 feet, and the depth over the sill to 35 feet below mean high water.

Four trestles with floors at about the elevation of the original surface and carrying tracks for locomotive cranes and dirt and concrete train have been built, two inside the lines of the dock and two just outside, extending the length of the dock. An efficient plant, consisting of nine 15-ton cranes, four locomotives, cars, concrete mixers, compressors, derricks, etc., has been installed and the work prosecuted vigorously.

Approximately 13,000 cubic yards of excavation in caisson, or nearly 40 per cent, have been performed, and approximately 9,700 cubic yards, or 60 per cent, of the concrete in the caisson have been placed. About 40,000 cubic yards of open excavation, of which

nearly 90 per cent has been outside the new lines of the dock, have been removed. The amount of useful work performed by the present contractors is estimated at approximately 20 per cent.

The amount of work performed on the basis of vouchers paid to the contractor is about 40 per cent. Twenty-five per cent of the contract time has elapsed. The amount paid to the present contractors is \$798,875.04; paid to former contractors and for plans and inspection, the yard labor, \$232,831.78, a total of \$1,031,706.82, which is 41.2 per cent of the total amount authorized.

Lean-to to building No. 131, act June 29, 1906.—This lean-to on the southeast side of the building is suspended from the steel frame of the building and, having no columns along the outer edge, material stored under its shelter can be removed or handled with ease by locomotive cranes.

The original plan was to extend this to the entire length of the building except where the boiler room is located. Only about 100 feet at the south end of the building has been built. The lean-to consists of a steel frame covered with corrugated galvanized steel without side wall. The remainder of this lean-to should not be built until dry dock No. 4 is completed.

Electric plant extensions, act May 13, 1908.—During the past fiscal year small amounts of work have been accomplished under this head, being for the most part continuations and extensions of work previously installed.

Central power plant, act March 3, 1909.—Considerable work has been done under this head during the year. The 1,000-kilowatt Westinghouse turbo-generator has been installed, together with the condensing equipment. All of the concrete-foundation work for this machinery was done by yard labor, the structural steel work being done by contract. The turbo-generator and its equipment is operating satisfactorily. The five direct-current generating sets in the northwest end of the building were removed and disposed of, thus preparing for the air compressors to be installed. The so-called "equipment boiler" was removed from the boiler room and foundations constructed by yard labor are practically ready for the new boilers to be removed from building No. 123. Both the coal and ash handling plants are practically complete and have been operating for some time. The 5,000 cubic feet air compressor under contract has not been delivered, as the foundations, constructed by the Government, are not yet ready for it. Minor changes to the piping and similar work were carried out as necessity indicated.

Sewer and drains, act May 13, 1908.—During the past fiscal year some necessary repairs and alterations to catch-basins, manholes, and sewers have been made, all tending toward making the system more perfect. The accident to the large sewer near the corner of building No. 20 made necessary some expense for repairs, and, as a result of this same accident, a new line of sewer has been laid down McDonough avenue from Fourth street to Third street.

Electric elevators, act March 2, 1907.—Small amounts of work only were done under this appropriation in connection with the electric elevators previously installed under contract.

Toward improvement of water-front facilities, act March 3, 1909.—During the year a definite programme for work under this head was evolved, which does not differ greatly from that proposed by the

Rodgers Board. The work undertaken has been in accordance with this programme. The dredging of Whitney Basin and the Wallabout Channel northeast of the entrance to dry dock No. 1 has been practically completed. Cutting through Phillips street and removing of the uncompleted pier No. 1 is well under way, the channel being 400 feet wide, the permanent quay wall on the northeast side being yet to be done. Contract has been entered into for the removal of the toe of the cob dock as far back as building No. 208, and work is progressing satisfactorily. All of the dredging done under this programme is to a minimum depth of 31 feet at mean low water, and the completion of the above-mentioned work will permit the direct passage of ships from the East River to the dry docks through Whitney Basin.

Raising floating crane Hercules, act June 25, 1910.—Immediately following the wreck of the Hercules arrangements were made and the work of salvage commenced. The pontoon was floated and docked for repairs and the upper works stored. Owing to the wreck occurring only a few days before the end of the fiscal year little work was accomplished previous to July 1.

Structural work and machinery, Hercules, act June 25, 1910.—The only work under this head accomplished during the fiscal year was the making of preliminary arrangements with the Brown Hoisting Machinery Company looking toward the reconstruction of the crane.

Alterations at hospital.—Lack of toilet facilities in the wings of the main building at the hospital was evident. To remedy this condition it was proposed to install a bathroom, toilet room, and instrument room in the north wing, and duplicate rooms in the south wing, all on second floor. The contract for this work was awarded to F. W. Conner Company, after which there was a long delay before work was actually undertaken. Progress was slow and at last it became evident that the contractors would not be able to finish the work. The matter was taken up officially and the National Surety Company, bondsmen for the original contractors, undertook to complete the work. Progress has still been slow and the contractors seem unable to arouse the subcontractor to take an interest in the work, but it is hoped to complete the work early.

NAVY-YARD, NORFOLK, VA.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$469, 222. 65
Repairs and preservation.....	105, 709. 39
Maintenance.....	180, 689. 92
Contingent.....	4, 282. 61
Total.....	759, 904. 57

YARD IMPROVEMENTS.

Repairs to buildings at St. Helena, act March 3, 1909.—Expenditures reported under this appropriation covered the cost of installing a heating system in the main camp, furnishing material for building a fence around the reservation—labor for the work being supplied by the enlisted force at the station—building a brig and mess hall, and

installation of cold-storage plant. The above work practically exhausted the appropriation.

Improvement to building No. 16, act May 13, 1908.—The work under contract for converting this building for use as a storehouse, was completed during the year. The available balance under this head was utilized in fitting up the second story for offices of the general storekeeper, his assistants and clerks. The building has been turned over to the general storekeeper, and is now occupied by him.

Compressed air system, act March 3, 1909.—Work under this sub-head during the fiscal year embraced the following items of improvements: Installing new piping and compressor at the central power station, installing air mains around dry dock No. 3 and south wharf. The work under contract of covering the pipes at the central station, a few minor alterations by the yard force, and outstanding material exhausted the appropriation.

Consolidating power plants, act April 27, 1904.—The expenditure under this appropriation was on account of contract entered into with Ingersoll-Rand Company for furnishing two air compressors and accessories for the central power plant. The two compressors have been satisfactorily installed.

Extraordinary allotment, under appropriation R. and P.—The work of rearranging the second floor of building No. 32 for offices of the hull, machinery, and accounting divisions was completed during the year, and the divisions mentioned are conveniently arranged on one floor. The west side of this building is fitted up for the drafting force of the hull and machinery divisions, and on the east side are located the offices of the machinery division, the accounting department, and aids to head of the hull division.

Dredging, to continue, act March 3, 1909.—After permanently berthing the receiving ships *Franklin* and *Richmond* further inshore, the work of clearing up all shoals around the former moorings of these vessels was undertaken and completed, providing a wider range and greater depth for modern ships to maneuver at this point, coming to the wharf. A considerable amount of dredging has been done in front of the new sea wall, which is rapidly nearing completion, and a clear depth of 30 feet at mean low water is given at this point. The work of cleaning out the entrance of dry docks 1 and 2 was completed during the year, providing a safe entrance and exit for these two structures. Other small expenditures under this appropriation covered the cost of connecting the two receiving ships with shore-line wires, water and steam pipes, at their new moorings.

Paving and grading, additional, act March 3, 1909.—The unfinished work of paving McKeever avenue was completed during the year, providing a main thoroughfare and connecting the north and south portions of the yard. Additional paving was done on Breese street from the west side of building No. 32, a small area of paving on Barron street, and additional catch-basins installed, completing the paving on this thoroughfare. The work of paving around the fitting-out basin with Belgian block was completed during the year. New curbing is being laid, preparatory to continuing the paving in the yard when additional funds are available.

Renew roof of foundry building No. 22, steam engineering, act May 13, 1908.—Under this appropriation the work of renewing the galvanized

corrugated-iron roof, installation of ventilators, and painting of all exposed ironwork was completed during the year. Other necessary alterations of minor importance will be made during the next fiscal year.

New roof and crane, building No. 23, act May 13, 1908.—The small expenditure reported under this head involved the work of making preparations to begin operations at an early date during the next fiscal year.

Telephone system, extension, act May 13, 1908.—The work of furnishing, on an annual rental basis, the necessary instruments and trunk lines by the Southern Bell Telephone and Telegraph Company was completed during the year. Installation of cable to St. Helena and leads to various buildings made necessary changes to party lines in the yard, incident to redistribution of offices resulting from consolidation of departments.

Improvements to water front, act March 3, 1909.—The work of constructing a new timber and concrete sea wall, under contract with W. L. Miller, extending from the marine railway to the entrance of the fitting-out basin, is rapidly nearing completion. A contract was entered into with Alsop & Pierce for renewing another portion of the old sea wall, extending along the water front to the entrance of the fitting-out basin for a distance of 330 feet. Expenditures made by government labor under this appropriation covered the cost of clearing away obstructions found to be in line of the work of contractors.

Renewing wharves at entrance to dry docks, act April 27, 1904.—The small expenditure under this appropriation was for renewing the decking and floor joists and other necessary repairs to put the wharf in thorough condition.

Extension of wharf at dry dock No. 3, act May 13, 1908.—Making slight alterations and repairs found necessary to wharf south of entrance to dry dock No. 3 was the only work undertaken under this head during the year.

Railroad tracks, extension, act March 3, 1909.—Considerable progress was made under this appropriation during the year, including a new track around the south side of fitting-out basin, completing a loop around this structure, and greatly facilitating the work of hauling stores and material for ships in the basin undergoing repairs. All tracks on McKeever avenue from the north end of building No. 65 were removed and new track, with steel ties imbedded in concrete, installed. New steel ties were placed under the rail on Breese street and new track on this street was laid from building No. 32 to building No. 28 near the water front. New rail was put down on Brown avenue, extending from building No. 28 to Nos. 61 and 62, including three switches and two crossings.

Concrete and granite, dry dock No. 3, act March 2, 1907.—The available small balance under this appropriation was used in the work of installing ring bolts in the face of the dock and building a water-closet for the accommodation of officers. Fresh water mains are being installed around the dock.

Heating system, extension, act May 13, 1908.—The expenditures under this head covered the cost of installing piping in connection with heater boilers in central heating plant, installing hot-water circulating pump, connecting the quarters at south end of the yard,

also quarters M and N; installing entire new heating apparatus in the offices of the general storekeeper (building No. 16), and making connections to the main line; installing low-pressure steam lines to building No. 32 for heating offices of the hull, machinery, and accounting divisions.

Electric plant, extension, act March 3, 1909.—Under this appropriation the following work was completed: Moved five motor generator sets from the basement of the power plant to their permanent location on the turbine floor and connected the same with the switchboard on the gallery; moved 300-kilowatt generator set from building No. 30 to the central power plant and erected the same on the foundation that had been prepared for it; installed two 30-kilowatt marine generating sets; installed distributing board in building No. 30 and changed the location of the direct current feeders to this building; made temporary connections between 1,000-kilowatt turbine and the switchboard; installed underground conduit system from substation F along building No. 56; connected high tension alternating current feeder system to the distribution panels of the switchboard; installed ship lighting system around fitting-out basin No. 2; installed high tension transmission system from power plant to substation F; installed two 100-kilowatt motor generator sets and switchboard in substation F; installed outlet boxes on the south side of dry dock No. 2; connected ship lighting lines to the distributing board in the power plant; installed ship lighting transformer on the north water front; installed ship lighting transformer on south wharf; installed 4-wire alternating current low tension distribution in buildings Nos. 37, 36, 32, 23.

Heating building No. 37, act May 13, 1908.—The contract entered into with the B. F. Sturtevant Company for the installation of a hot-air heating and ventilating system was completed during the year. Expenditures by the yard force under this head covered the cost of fittings and additions not included in the above contract.

Central power plant, act May 13, 1908.—Expenditures by the yard force covered the cost of completing tram-runway foundations, power-house floor steel and concrete work, foundations for 3,000-cubic-foot air compressor, switchboard gallery, foundation for 1,000-kilowatt turbine, and fitting up toilet accommodations for power-plant employees. Contract work completed during the year embraces the following items: Installation of 1,000-kilowatt turbine, 1,050-horsepower boiler, 3,000-cubic-foot air compressor, 4,000-square-foot condenser, 3,600-gallon circulating pump, and power-house switchboard. The general condition of the plant at the close of the year is about 90 per cent complete.

Building coal wharf, act March 2, 1907.—The expenditures under this appropriation covered the cost of preparing plans and specifications preparatory to beginning the work.

Locomotive crane, act March 3, 1907.—The contract was entered into with the Browning Engineering Company during the year.

Dry kiln for construction and repair, act May 13, 1908.—Plans for this structure were completed during the year.

Crane track, act March 3, 1909.—The contract for the crane track around dry dock No. 3 was entered into with Alsop & Pierce, and the work was completed during the year.

NAVAL STATION, OLONGAPO, P. I.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$78, 749. 85
Repairs and preservation.....	16, 170. 31
Maintenance.....	49, 320. 12
Contingent.....	7, 386. 71
Total.....	151, 626. 99

YARD IMPROVEMENTS.

Repairing buildings erected by Spaniards and repairs to existing buildings, act March 3, 1906.—Minor repairs were made to building No. 13 and the available balance exhausted.

To complete survey of the reservation, act April 27, 1904.—A great deal of work remains to be done under this head. During the year work has been in progress on detailed survey of the magazine, coal-ing-plant, and rifle-range reservations, and the land intervening between them and the dock yard proper, but this work has not yet been completed. Items of survey work involving the determination of lines and levels for improvement have also been made under this head.

Toward building quay wall, act April 27, 1904.—A contract was signed by the commandant with S. A. Reich, of Manila, December 21, 1909, for the construction of a quay wall along the main water front facing the entrance to Subig Bay. The progress on this work has been very poor. The piles have been driven from a point near the new shipfitters' shop to a point opposite the civilians' quarters. Concrete quay wall has been completed only from the floating dry-dock wharf to a point opposite quarters A. A part of the wall has also been ripped up by the station force. In order that the wall may continue to serve a useful purpose in after years it is considered essential that jetties or piers should be built at right angles to the shore so as to prevent the shifting of beach sands and their lodgment in front of the wall. The sands move easterly along the beach and in time will deposit in front of the quay wall to such an extent that a beach will form.

One pier for landing and receiving stores, act April 27, 1904.—A concrete pier with concrete top and concrete cylinders resting on wood piles has been completed. A balance remains of the appropriation which it is proposed to expend in closing the gap between the two parts of the pier built out of this appropriation.

Sewer system, act March 3, 1905.—Under this appropriation various extensions of the sewers of the yard were made. Work was begun on the sewer extending inward from the inward inner basin along the easterly side of building No. 8.

Hoisting machinery, act March 3, 1905.—A derrick was moved from the yard and installed at the rock crusher. An additional derrick was made out of materials available and also erected at the rock crusher. Both are for the purpose of handling large-sized rock on to scows and cars.

Purchase and installation of tools and machinery, act June 29, 1906.—Improvements in the fresh-water distilling system have been

made. Electric wires have been installed in the various buildings. Two 150-kilowatt units were placed on yard load July 25. Erection of pole lines for new circuits and interior wiring of machine shops and other buildings were completed. Contract has been awarded for a refrigerating and cold-storage plant, but the material did not arrive on the station during the fiscal year.

Wharf for floating dry dock, act June 29, 1906.—A concrete wharf, consisting of concrete cylinders resting on timber piles and with a deck of reinforced concrete, has been completed in proximity of the floating dry dock *Dewey*. Various minor items of work, such as improving the approach to the wharf, placing fresh-water pipe along the face of the wharf for issue to ships, extending of fresh-water pipe to the dry dock, the placing and mooring of pontoon approaches to the dry dock, construction of bridges to span the spaces between pontoons and between the pontoons and the dock and wharf, construction of a small approach wharf to the pontoons, erection of a small galvanized-iron shed on the main wharf have all been completed during the fiscal year.

Drainage canal, to complete, act June 29, 1906.—A small amount of dredging has been done to improve the drainage.

Water system, to extend, act March 2, 1907.—Water pipe was extended into the native town of Olongapo for the purpose of supplying water for domestic use and for fire purposes.

Quay walls, act March 2, 1907.—The same remarks apply here that are given under appropriation "Toward building quay wall."

Improvement and development of the naval station, act May 13, 1908—Shipfitters' shop.—Contract was awarded for a steel frame building with galvanized-iron sides and roof for use as a shipfitters' shop. At the end of the fiscal year the steel work had arrived on the ground and was in process of erection. A power-house building, consisting of two parts with steel frame and galvanized-iron cover, was completed. The material in the temporary power house, consisting of timber frame with galvanized-iron cover, was reerected in another location and is now in use as a dock shop building No. 39.

Quarters for civil employees.—One building, containing four compartments for married civilians, was completed; also another building containing sixteen rooms for bachelor civilians. A guardhouse for the marines near the barracks buildings was completed.

Road, dikes, and grading.—Roadway from commandant's quarters to west gate was completed. The full amount of the original allotment under this subhead has not been available for the work since it was drawn on to complete items where the allotment proved insufficient. Road was also constructed leading from the west gate to the town.

Railroad track and equipment.—A large amount of railroad track material was purchased sufficient to lay about 8,000 feet of track, but the balance available of the appropriation at the end of the fiscal year will not be sufficient to lay more than about 1,000 feet of the railroad track.

Minor buildings.—An office has been erected for the master of tugs and has been found exceedingly useful. The building was placed on the inner basin at the southwest corner. A building was erected as an annex to building No. 13 which is now in use as a post-office and toilets.

Mooring pads on floating dry dock.—Four mooring pads were placed on the dock a few feet above the wood fender. The mooring chains have been connected to the pads on the west side, but have not yet been connected on the east side.

Wiring marine corps buildings.—This work has been completed. The barracks and auxiliary buildings are now provided with electric lights which is a great advance over the former method of lighting. The principal mains were also run under this appropriation. A meter has been installed on a pole line and records all the current furnished to the post quartermaster.

Roof of buildings Nos. 3 and 8.—The buildings are now dry which was not formerly the case, and the roof should last for a long time. The work was done out of the allotment for roads, dikes and grading.

NAVY-YARD, PENSACOLA, FLA.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$5,464.77
Repairs and preservation.....	14,898.48
Maintenance.....	22,051.59
Total.....	42,414.84

YARD IMPROVEMENTS.

Sewer system, act June 29, 1906.—Work under this appropriation consisted of taking up sewer pipe on Central avenue, removing defective sections, and resting them on concrete foundations owing to quicksand.

Prior expenditures were for the purchase of material and installing sewer system in 4, 6, 8, and 10 inch pipe throughout the yard, building of a cesspool and sewer pump house.

Closets and lavatories, act March 3, 1905.—The necessary connections were made with the sewer and water systems with the view of installing toilets in servants' quarters in rear of officers' houses.

Improvements to storehouse No. 25, act March 2, 1907.—Work of placing additional supports under both sides of mezzanine floors was completed and received coat of paint.

Prior expenditures were for the installation of mezzanine floors on both sides of lower floor and the raising of fire walls over four brick partitions.

Machinery for central power plant, act May 13, 1908.—Expenditures under this appropriation during the past fiscal year have been made as follows: Installing temporary floors around engines and air compressor; for the purchase of pipes, valves, and condenser to be used in connection with installation of 600 cubic feet air compressor.

The plant has been in operation for the past eight months for furnishing power and pumping water to elevated tank, and the working of the machinery has been satisfactory.

The capacity of the 30-kilowatt direct-current motor-generator set, originally purchased for operating the wireless station and naval hospital lights, is insufficient, especially so when extra load of well pump motor is added; an additional unit is required. There being but one main generating unit the successful operation of the plant is

handicapped, pending the arrival of the 300-kilowatt unit from Philadelphia.

Water system, act May 13, 1908.—The discharge piping from the turbine pumps at the pumping station near the naval hospital has been changed so that the pumps can be started under no pressure and gradually cut in on mains; valves in connection with water station near hospital have been repaired.

Railroad track and equipment, act May 13, 1908.—The railroad system throughout the yard is being overhauled with the view of removing decayed ties and replacing them with creosoted material, without seriously interfering with traffic. The boiler of locomotive No. 2 was retubed.

To repair rifle range and wharf, act March 3, 1909.—Preliminary work is being done in clearing, and installing telephone connection with the yard system.

NAVY-YARD, PHILADELPHIA, PA.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$446,582.01
Repairs and preservation.....	45,152.00
Maintenance.....	142,246.33
Total.....	633,980.34

YARD IMPROVEMENTS.

Building for bathing, examination of recruits, and disinfection of clothing, act June 29, 1906.—At the close of the last fiscal year the foundations, drains, and millwork were completed and the brickwork started. The work was continued during the current year, and the building was entirely completed the latter part of October, 1909. Owing to a difference of opinion as to the requirements of the contract for laying terrazzo floor and placing marble partitions, final payment for the work was not made until February, 1910. Upon completion the building was occupied by the Medical Department for the purpose for which it was intended.

Shelves and wall cases, etc., for building No. 4, act May 13, 1908.—The work of paving the courtyard of building No. 4 and providing shelter for the same, which was in progress at the close of the last fiscal year, was completed August 27, 1909.

Extension of railroad system, act May 13, 1908.—The expenditures noted under this subhead were made in extending the railroad system as follows: West on Porter avenue to connect with the track around dry dock No. 2; from the east side of building No. 22 (power plant) around the south side of the building to connect with the track on the east side of dry dock No. 2; and on Rowan avenue curves were constructed leading to piers A and B.

Equipment for railroad, acts March 3, 1901, and May 13, 1908.—The expenditures noted under this subhead were for the purchase of various equipment, including six side dump cars, one hand car, and one flat car.

Four timber dry docks, act May 4, 1898.—At the close of the last fiscal year all the defects and deficiencies existing in the work under contract No. 1045 and its supplements at the time it was canceled

were completed with the exception of replacing the three main engines and the oiling system, which were found defective and were rejected.

During the year two of the defective engines were dismantled and properly stored on block No. 48, and the foundations modified to receive the new engines contracted for with McIntosh, Seymour & Co., under contract No. 1388, dated September 14, 1909. Two of the new engines have been delivered and their installation is practically completed. The first engine and generator with which it is connected were used in pumping out the dry dock during the latter part of June, and worked satisfactorily. The work of installing steam and exhaust piping to the engine and of making electrical connections to the generators was about 62 per cent completed at the close of the fiscal year.

The property of the Atlantic, Gulf and Pacific Company, which was sold July 7, 1909, was all removed from the navy-yard with the exception of lot No. 4, consisting of railroad material and scrap iron, which was purchased by the Marine Metal and Supply Company, who were afterwards relieved of their contract. The material was readvertised, but no bids were received.

Sewer system, extensions, acts March 3, 1905, and June 29, 1906.—The expenditures under this subhead were made in connecting drains around building No. 22, central power plant, which discharge through the quay wall.

Fire protection system, extensions, acts April 27, 1904, March 3, 1905, and June 29, 1906.—The expenditures noted were made in connection with the installation of fire hydrants on the south side of the reserve basin.

To continue retaining wall about reserve basin, acts March 3, 1905, June 29, 1906, and March 2, 1907.—At the close of the last fiscal year about 20 per cent of the work under contract No. 1329, dated September 12, 1908, with the Lawler Brothers Construction Company, for the construction of pier C and retaining wall G in the reserve basin, was completed. The work was finally completed June 18, 1910. The expenditures also include the cost of the extruded brass bolts provided by the Government in connection with the above contract.

Sea wall, extensions, acts April 27, 1904, and March 2, 1907.—At the close of the last fiscal year the excavation was completed and about 80 per cent of the piles driven on the section of 250 feet of retaining wall in the reserve basin extending west from pier C. The work was finally completed December 1, 1909.

Berth for receiving ship, to extend, acts March 3, 1905, and March 2, 1907.—At the close of the last fiscal year, plant was being assembled preparatory to driving piles for the new pier. Piles were being driven during the early part of the year, but owing to delays in the delivery of material it became apparent that the work could not be completed before winter, and as it was considered inadvisable to have uncompleted structure exposed to floating ice, so common in the river during a severe winter, the work was discontinued. Work was resumed in the spring, and at the close of the fiscal year about 80 per cent of the piles were driven and 25 per cent of the capping in place.

Central power plant, to complete, acts May 13, 1908, and March 3, 1909.—At the close of the last fiscal year the test on the 5,000 cubic foot air compressor installed by the Nordberg Manufacturing Company

under contract No. 1320 was in progress. With the exception of a defective bonnet casting and the throttle valve failing to entirely shut off steam, the compressor proved satisfactory in every respect. The above details were not remedied until the early part of December, 1909, when the machine was finally accepted and the contract closed.

The work of installing an ash handling and storage plant in building No. 22, under contract No. 1325, with the Darley Engineering Company, was commenced July 14, 1909, and the work was completed and finally accepted January 29, 1910.

At the close of the last fiscal year about 40 per cent of the work under contract No. 1327, with the Guarantee Construction Company, for the installation of coal-handling machinery in building No. 22, was completed. The work was completed and finally accepted January 21, 1910.

The work under contract No. 1333 with the Edge Moor Iron Company for the installation of four boilers with superheaters and stokers, connecting flue, stacks, and other accessories, which was almost completed at the close of the last fiscal year, was considerably delayed on the part of the Government in making piping connections to the boilers and in the construction of building extension in which the boilers are housed. The installation was tested in accordance with the contract during the latter part of October, 1909, and proved satisfactory in every respect with the exception of the stokers, whose performance was considered most unsatisfactory and delayed the final acceptance of the installation until January 18, 1910.

The installation of the 500 kilowatt turbo-alternator provided for by contract No. 1335, with the Westinghouse Machine Company, was completed in the early part of January, 1910, but the operation of the machine is delayed awaiting the installation of condensing apparatus.

The 5,000 cubic foot air compressor provided for by contract No. 1371, with the Laidlaw-Dunn-Gordon Company, has been delivered, and at the close of the fiscal year the installation of the same was about 98 per cent completed.

No work has been done at the yard under contract No. 1390, with the Allis-Chalmers Company, for furnishing and installing motor generating sets, exciter sets, and switchboard, etc., with the exception of the delivery of the switchboard.

The following work performed by yard forces was completed during the year:

The construction of the eastern extension of building No. 22, central power plant, which was about 67 per cent completed at the close of the last fiscal year; the installation of piping in connection with the Edge Moor boilers; the extension of underground electric conduits, compressed air, artesian, and Delaware water piping to piers A and B in the reserve basin; the extension of steam conduit and piping from building No. 115 to building No. 44 and conduit and piping to provide direct steam connection from building No. 22 to line north from building No. 13 in the system previously constructed; the construction of foundations for the 500-kilowatt turbo-alternator and the 5,000 cubic foot air compressor; the making of steam, water, and electrical connections to the ash-handling machinery; the making of electrical connections to the coal-handling machinery, and the construction of a substation building for motor-generating sets on the north side of the reserve basin.

At the close of the fiscal year all the steel work, about 65 per cent of the brickwork, and 50 per cent of the roof of the southern extension of building No. 22, central power plant, were in place; about 15 per cent of the work of constructing foundations for the 1,000-kilowatt turbo-alternator and 50 per cent of the air piping to pier C in the reserve basin were completed.

Dredging, act March 3, 1909.—The work of extending the culvert under the causeway in the east reserve basin under contract No. 1377, with the American Paving and Construction Company, was commenced October 18, 1909. Owing to the severe winter, work was suspended from January 5 to February 23. Although the work was carried on continuously during the rest of the time, the progress was slow. At the close of the fiscal year the work was practically completed, only 18 cubic yards of concrete remaining to be placed.

Preparations for dredging in the reserve basin, under contract No. 1379, with the American Dredging Company, were begun September 9, 1909. The work was carried on continuously during the year, and the progress made was very satisfactory. Section B was completed May 3, 1910, 304,394 cubic yards having been removed from the section. At the close of the fiscal year 665,346 cubic yards had been removed from section C and 38,065 cubic yards from section E. Section C is about 95 per cent completed. The materials removed under this contract were deposited in pier B, on government lands along the northern part of the reservation and on the lowlands lying north of the yard and west of Broad street.

The Atlantic Dredging Company began dredging along the Delaware water front under contract No. 1382, September 18, 1909. Owing to lack of proper equipment, the progress on the work was exceedingly slow and unsatisfactory. On April 13, 1910, after the failure of the company to fulfill their repeated promises to increase their plant, the department declared the contract null and void. Upon further representation of the company, the department, however, canceled its action, and the work was resumed on April 15 under contract No. 1433. The progress since, although better than at the beginning of the work, has been comparatively slow. There were removed during the year from section A 120,985 cubic yards and from section D 16,800 cubic yards, being about 24 per cent of the entire work. The material removed from section D was deposited back of the quay wall west of dry dock No. 2, and that from section A was removed in scows and deposited in the east reserve basin and relayed on to city lands to the north of the navy-yard and east of Broad street.

Crane track, extension, act March 3, 1909.—The extension of the crane track around dry dock No. 2 was completed May 5, 1910, at a cost, including indirect charges, of \$13,220.33.

Paving between the crane track rails and adjacent thereto was authorized as part of the crane-track extension. At the close of the fiscal year about 80 per cent of the concrete base had been placed. Progress on the work was considerably retarded on account of delay in the delivery of satisfactory paving brick.

Paving around piers, act March 3, 1909.—The work of paving pier A and along the south side of the Reserve Basin was commenced immediately after receipt of authority, but the work was somewhat delayed on account of placing under the pavement conduit for elec-

tric cables, piping for compressed air, artesian and Delaware water, so that the work could not be entirely completed before the beginning of freezing weather. The work was suspended from December 27 to March 4, 1910, when work was again resumed and carried to completion March 19, 1910.

To the work originally authorized there was added about 502 square yards of paving. The entire work was performed at a cost, including indirect charges, of \$26,982.60.

NAVY-YARD, PORTSMOUTH, N. H.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$52,127.69
Repairs and preservation.....	39,741.87
Maintenance.....	121,982.70
Contingent.....	507.72
Total.....	214,359.98

Rebuilding and extending coaling plant, act March 2, 1907.—This work was practically completed at the close of the fiscal year 1909. The small expenditure made during the present year was for material drawn by the manufacturing department to complete.

Blasting in front of quay wall, act May 13, 1908.—On August 27, 1907, contract No. 1293 was entered into with Johnston & Virden for blasting in front of the extension of the east quay wall southward of the coaling plant. The work was completed in a satisfactory manner July 3, 1909.

Quay wall, extension, act May 13, 1908.—Under this appropriation contract No. 1335 was entered into with Thomas Fitzgibbon, under date of April 26, 1909, for an extension of quay wall. The work of laying wall was commenced in June, 1909, and was completed in February, 1910. Eighty lineal feet of wall was built. That portion of the work necessary for the strengthening of the quay wall for the erection of the 100-ton shears was charged to this appropriation.

Improvement 100-ton shears, act May 13, 1908.—Contract was made November 25, 1908, with C. M. Leach for the erection of the shears, which work was completed July 17, 1909. The shears have been tested to 100 tons and worked satisfactorily.

Removal of Hendersons Point, act March 3, 1903.—The progress of this work throughout the year has been extremely slow. There has been continual difficulty experienced in prosecuting the work, owing to swift current, accidents to scows, dredges, etc. Contractors have been engaged during the year in removing the high places. The work is practically completed, and a final survey of the bottom will soon be made.

Central power plant, extension, act March 2, 1907.—The expenditures under this appropriation were for changes in piping made necessary by the installation of boilers.

Fittings and tools for pattern shop, act April 15, 1908.—Three additional metal shelves were fitted to each of the twelve racks in pattern shop to better accommodate patterns on hand and better utilize storage space.

Sewer system, extension, act May 13, 1908.—Work under this appropriation was postponed awaiting progress on new buildings.

Storehouse for combustibles, act May 13, 1908.—Under this appropriation contract 1398, with Charles H. Holmes, was entered into October 30, 1909, for the construction of a concrete oil-storage house. Work was commenced November 18, 1909, and continued for a time in preparatory work, foundations, etc., but on account of climatic conditions, it was suspended until such time as the weather was suitable for concrete work.

Railroad, extension, act May 13, 1908.—The necessary switches and frogs were installed and the track was extended from building No. 80 (machine shop) to the stone-crushing plant, and a spur was laid under the coal pocket. A spur track was also laid into the foundry, building 75, and the track on the flatiron pier was finished.

Heating system, extension, act May 13, 1908.—Work has been postponed under this appropriation awaiting plans for extensive change in system.

Electric plant, extension, act May 13, 1908.—Under this appropriation recording watt meters have been installed in nearly all the buildings in the yard, and a number of the buildings have been connected to the underground electric system, and a portion of the overhead wires taken down.

Naval prison, extension, act May 13, 1908.—On October 3, 1908, contract 1332 was entered into with A. P. Knapp, for the installation of 160 additional cells at the naval prison. This work was practically finished in August, 1909, but owing to defects in the locking device, final settlement was not authorized until July, 1910. Six arc lights have been installed on outside of prison, and experimental test of waterproofing material has been in progress. Several jobs of a minor nature have been done under this subtitle such as extensions of piping, heating, etc.

NAVAL STATION, SACKETTS HARBOR, N. Y.

The expenditures during the fiscal year for labor and material were as follows:

Repairs and preservation.....	\$1,728.31
Maintenance.....	379.60
	<hr/>
Total.....	2,107.91

Miscellaneous.—Work: Painting, A and B quarters, barn, ice house, well house, root house, gun house, and fences, completed August 4, 1909; repairs on A and B quarters, sidewalks, fences, new cistern, well house, ice house, and barn; patching plaster and cistern was completed July 20, 1909; moving and mounting Parrot gun at naval station; and six days' labor clearing grounds.

Expenditures from "Maintenance" were for the pay of the ship keeper in charge of the station.

NAVY-YARD, PUGET SOUND, WASH.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$596,553.71
Repairs and preservation.....	31,439.76
Maintenance.....	107,640.63
Contingent.....	719.78
Total.....	736,353.88

Yard scow, to complete, act April 27, 1904.—Under the appropriation the scow *Rex* was built by the manufacturing department and launched September 13, 1901.

Sewer system, extensions, act March 3, 1909.—The appropriation under this subtitle has been exhausted in completing small sewer connections and the construction of catch basins, the extension of sewers on the water front made necessary by the filling along the shore of material taken from the excavation for dry dock No. 2, and in expenditures for draining the heating system.

Central power plant, act May 13, 1908.—The appropriation under this subtitle has been exhausted in work in and about building No. 106, the concrete foundations for which were completed by the yard force, June 28, 1909.

Water-closets for ships in dock, act June 29, 1906.—Under the appropriation with this subtitle, water-closet building 105-A was begun July 2, 1908, and completed June 25, 1909. Minor details since added have exhausted the appropriation.

Boiler and blacksmith shop, to complete, act March 3, 1903.—Under this appropriation some work has been done, practically exhausting the appropriation, in connection with the two 20-ton electric traveling cranes furnished by the Ransome Concrete Machinery Company, under contract of October 15, 1907. The cranes were practically completed November 20, 1908.

Fire-alarm system, act April 27, 1904.—Under this appropriation work has been done by the yard force on the installation of a 125-volt dynamotor set on ringing circuit; 98 per cent completed.

Fire-protection system, extensions, act March 3, 1905.—Under this appropriation work has been done by the yard force as follows: Hose has been installed, also two hydrants on piers 6 and 7 and connected with salt-water system by laying 8-inch pipe from building 106 to building 58 and thence to 12-inch pipe already installed from building No. 107 to No. 145, thence to No. 56 with 8-inch cast-iron pipe a length of 750 feet. Also three hydrants have been installed, two in vicinity of building No. 145 and one in vicinity of building No. 86.

Boat shop for construction and repair, act March 3, 1905.—Under this appropriation work has been done by the yard force in remodeling the second floor of the boat shop, building No. 104, giving the space formerly used for offices to increase the space assigned for the storage of boats.

Stone and concrete dry dock, to complete, act March 3, 1909.—Under this appropriation a contract of September 2, 1908, was made with C. J. Erickson, of Seattle, Wash., for the construction of a stone and concrete dry dock to be completed March 2, 1912.

Quay wall, extensions, act March 2, 1907.—Under this appropriation concrete retaining walls have been constructed by the yard force outside the tracks leading to the gridiron at the southeast corner of the yard. Work began May 7, 1910, and was completed June 16, 1910.

Water system, extensions, act May 13, 1908.—Under this appropriation work has been done by the yard force as follows:

The 6-inch fresh-water main has been extended south on the east side of the central power station, building No. 106, in place of the 4-inch main taken out. South of the smithery, building No. 84, and machine shop No. 2, building No. 58, the 6-inch main has been run into the tunnel under the 40-ton crane track on the east side of dry dock No. 1.

The extension of the 4-inch main from near the northwest corner of board of labor office, building No. 56, south, thence east, thence south and west to a junction with the 4-inch main southwest of the joiner shop, building No. 91, begun May 21, 1909, was completed July 24, 1909.

Heating system, extensions, act May 13, 1908.—Under this appropriation heating pipes have been installed in concrete conduit from the southwest corner of the boiler and erecting shop, building No. 109, to the general office building, No. 78, to the boat shop, building No. 104, and to the central power station, building No. 106; 98 per cent completed. The steam main in the east tunnel of the dry dock (No. 1) has been extended to the head of the dock, thence to the conduit south of machine shop No. 1, building No. 66, and thence to the manhole south of the west end of said building. Completed.

Sewer system, extensions, act March 3, 1909.—Under this appropriation work has been done by the yard force as follows:

The lower ends of the two sewers from the officers' quarters and the gunners' quarters have been relaid and elevated and extended from the main road south beyond the brush protection of the water front fill of earth deposited from the excavation for dry dock No. 2. Completed February 1, 1910.

A sewer manhole has been constructed north of dry dock No. 1 in line of the 7-inch heating main and a pipe outlet laid south through the altars to the dock. Completed February 23, 1910.

A 6-inch drain has been constructed from manhole near southwest corner of boiler and erecting shop, building No. 109, easterly to manhole near southwest corner of pattern shop, building No. 88, with connections to heating, electric, and drain manholes between these points, including new manhole near southeast corner of machine shop No. 1, building No. 66.

The 6-inch drain from heating conduit north of boiler and erecting shop, building No. 109, has been relaid and graded to new manhole. Completed June 1, 1910.

A new sewer has been laid on the east side of machine shop No. 2, building No. 58, into which has been led the down spouts of the building.

Telephone system, extensions, act May 13, 1908.—Under this appropriation a galvanized iron wire telephone circuit has been run from terminal near the U. S. R. S. *Philadelphia* to the Charleston gate to connect with the line to the naval magazine site. Completed May 31, 1910.

Telephone instruments have been installed in various offices and shops as required.

Railroad and equipment, extensions, act March 3, 1909.—Under this appropriation work has been done by the yard force as follows:

Track has been laid on the west side of the hardwood lumber shed, building No. 145, at elevation 130.26 connecting with the main track south on a 2 per cent grade. Completed December 24, 1909.

Standard gauge tracks have been laid north and south from a point on the main track east of the railroad scales south of pattern shop, building No. 88, that to the south extending to and into storehouse, building No. 64, and that to the north to a point near the locomotive shed, building No. 132. The track west of the joiner shop, building No. 91, has been moved 4 feet farther west parallel to its old location. Completed May 4, 1910.

A cross-over track has been laid from main line to siding west of dry dock No. 1. Completed May 24, 1910.

Central power plant, extensions, act May 13, 1908.—Under this appropriation, expenditures have been made for work performed by the yard force as itemized below:

For constructing concrete foundations for and erecting after cooler and receiver in central power station, building No. 106; 90 per cent completed.

For painting door and window frames, doors and sashes two coats white lead and oil; 20 per cent completed.

For cleaning and giving coat of linseed oil to steam drums, inside and out, beams and finished surfaces of tube headers of two 450 horsepower boilers received from Mare Island and storing them in the south end of the boiler room of the building; 80 per cent completed.

For constructing reinforced concrete roof, 197 squares, not including waterproof covering; 92 per cent completed.

For hanging sashes and doors including hardware; 92 per cent completed.

For constructing and delivering sashes and doors, window and door frames; 98 per cent completed.

For constructing and fitting copper cornice gutters and conductors including necessary supports; 80 per cent completed.

A contract, No. 1378, of date August 30, 1909, was made with the D'Olier Engineering Company, of Philadelphia, Pa., for a power plant equipment consisting of piping, pumps, condensers, feed-water heaters, hot-water meters, and other fittings and apparatus.

Contract No. 1315 of date April 30, 1908, with the Babcock and Wilcox Company, of Philadelphia, Pa., for the installation of four 450 horsepower boilers, flue and stack, for which final voucher was forwarded April 13, 1909, has been reopened for the erection of two additional boilers which have been received from Mare Island and which for the present are stored in the central power plant station, building No. 106.

A contract of June 23, 1908, was made with the Laidlaw-Dunn-Gordon Company, of New York, N. Y., for a 5,000 cubic foot air compressor with accessories, the original contract price being \$27,100, and the time of completion being December 23, 1908. Later, two changes were made whereby the contract price was reduced to \$26,225. Construction began November 1, 1908, and at the close of the fiscal year the contract was considered 99 per cent completed.

A contract of October 23, 1908, was made with the Westinghouse Machine Company, of New York, N. Y., for two turbo-alternators of 500 and 1,000 kilowatt capacity, respectively, the original contract price being \$29,249, and the time of completion April 23, 1909. At the close of the fiscal year the contract was considered 90 per cent completed.

Hardwood lumber shed, building 145, act May 13, 1908.—Under this appropriation expenditures have been made toward continuing the construction of this building, 300 by 50 feet in plan dimensions, which was finally completed, by the yard force, January 3, 1910.

Water-closets for ships in dock, act May 13, 1908.—A contract of May 11, 1910, was made with the Sound Construction and Engineering Company, of Seattle, Wash., for the construction of water-closets for ships in dock. This contract includes two water-closets, one within the boat shop, building No. 104, in its southwest corner, for the use of yard workmen, and another, a separate building, No. 155, 41 by 19 feet in plan dimensions, outside the southwest corner of this boat shop for the use of ships in dock. The original contract price was \$15,531, and the time of completion November 11, 1910. Subsequent changes reduced the contract price to \$15,419.62. Work began May 16, 1910, and at the close of the fiscal year the contract was about 20 per cent completed.

Underground conduit system, act May 13, 1908.—Under this appropriation work has been performed by the yard force as follows:

On a heating system conduit leading north from the central power station, building No. 106, between machine shop No. 2, building No. 58, and smithery, building No. 84, thence westward to a connection with a manhole south of machine shop No. 1, building No. 66; 98 per cent completed.

On 490 feet of 12-duct electric conduit on the main street between the southwest corner of the boiler and erecting shop, building No. 109, and the southwest corner of pattern shop, building No. 88, with three concrete manholes. Also a 12-duct electric conduit south from manhole at the southwest corner of pattern shop, building No. 88, to central power station, building No. 106, with manhole about midway; 80 per cent completed.

Electric elevator and fittings, building No. 59, act May 13, 1908.—A contract of October 26, 1908, was awarded to the Otis Elevator Company for furnishing and installing an electric elevator in the storehouse, building No. 59, for the sum of \$3,800, the contract time of completion being March 26, 1909. Final voucher for this went forward July 26, 1909. Work has been done by the yard force in deepening the elevator well, bringing it 3 feet 6 inches below floor level, in making concrete foundation for elevator, and in cutting two 12-inch I beams to fit the steel work of the shaft as required by the Otis Elevator Company.

General storehouse, act March 3, 1909.—A contract of June 27, 1910, with date of completion June 27, 1911, was awarded to C. F. Graff, of Seattle, for the construction of this building, No. 157, of plan dimensions 249 feet 4½ inches by 170 feet 3 inches and four stories in height.

Two officers' quarters, act March 3, 1909.—A contract of May 30, 1910, for the sum of \$16,938 and time of completion March 31, 1911, was made with L. A. Williams & Son, of Seattle, for the construction

of two officer's quarters. Work began June 7, 1910, and at the close of the fiscal year the contract was about 20 per cent completed.

Naval Hospital, act March 2, 1907.—A contract of May 29, 1909, was made with the W. N. Concanon Company, of San Francisco, for the construction of "Buildings for naval hospital," with date of completion August 29, 1910. The original contract price was \$143,971, but several changes later increased this to \$149,870. Work began June 14, 1909, and at the close of the fiscal year the contract was estimated as about 85 per cent completed.

Floating derrick, act March 3, 1909.—A contract of September 23, 1908, and date of completion September 23, 1909, for the sum of \$230,000, was made with the Wellman-Seaver-Morgan Company, of Cleveland, Ohio, for a 100-ton floating derrick. Construction began in February, 1909, and at the close of the fiscal year the contract was estimated as 98 per cent completed.

Naval hospital fund.—Against this appropriation has been charged work of the yard force in constructing 1,273 lineal feet of 8-inch sewer from near the naval hospital to a connection with the yard sewer system near the gunners' quarters, completed June 27, 1910, and in running an 8-inch cast-iron water pipe from the yard main to connect with the hospital system. Completed.

NAVAL STATION, SAN JUAN, P. R.

The expenditures during the fiscal year for labor and material were as follows:

Repairs and preservation.....	\$7,595.37
Maintenance.....	13,385.56
Total.....	20,980.93

YARD IMPROVEMENTS.

No yard improvements were made during the year, the only expenditures being for the general maintenance of the station and some minor repairs.

NAVAL STATION, TUTUILA, SAMOA.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$3,848.61
Repairs and preservation.....	6,686.48
Maintenance.....	14,514.22
Total.....	25,049.31

YARD IMPROVEMENTS.

Dispensary and sick quarters, act May 13, 1908.—Plans of dispensary and sick quarters were received at the station June 28, 1910. No material arrived and consequently no work has been done under this appropriation.

Two officers' quarters, act March 3, 1909.—The appropriation for these quarters was made March 3, 1909. In June, 1910, word was received that the plans were approved by the department. Work

was begun on June 13. The quarters were 59 per cent completed at the end of the year. The interior finishing, plumbing, and painting remains to be done.

Preservation of grounds, act March 3, 1909.—The appropriation for this work was made March 3, 1909. Work was begun in February, 1910. At the end of the year it was 90 per cent completed. A concrete retaining wall was built to keep the top of the commandant's hill from washing away and concrete steps and concrete walk were built up the hill. The remaining work consists of putting a railing of pipe in concrete posts at the side of the steps. The pipe for this has been ordered but not yet received.

NAVY-YARD, WASHINGTON, D. C.

The expenditures during the fiscal year for labor and material were as follows:

Yard improvements.....	\$78, 811. 36
Repairs and preservation.....	44, 605. 17
Maintenance.....	103, 775. 21
Total.....	227, 191. 74

YARD IMPROVEMENTS.

Coal storage and handling plant for new power plant, act April 27, 1904.—This plant was practically completed in 1905, but in the final readjustment of the account a balance of \$410.56 was found, which has been applied to the plant in strengthening foundations, painting trestlework, etc. This work was finally completed February, 1910.

Telephone and time systems, extension, act April 27, 1904.—This object of work was completed in February, 1910, at a cost of \$2,000 for material purchased under act of April 27, 1904, and \$325.01 for material on hand from old stock. Sixteen long-distance telephone sets complete, one master clock, several secondary clocks, and other materials were purchased for use on the above system. No labor was applied in connection therewith.

Fire protection system, act March 3, 1905.—This appropriation of March 3, 1905, under above head, was exhausted February, 1910. \$4,460.65 was applied in material and \$600 applied for labor in keeping the system in good order. \$373.06 was expended for material from above appropriation during the year. An ample supply of fire hose was purchased during the year under "Naval supply fund." Several shops have been supplied, and a considerable quantity remains in store to be drawn out by card.

Underground conduit system, to extend, act June 29, 1906.—This object of work was completed February, 1910. Under this object of appropriation much new cable has been installed to replace old and burned-out cable.

Railroad system, to extend, act June 29, 1906.—The extension of the yard railroad system, under this appropriation, was completed December, 1909. The track has been extended along the water front in the new extension of the yard. The railroad in the yard may be reported as generally in serviceable condition.

Extension and improvement, telephone and fire alarm system, act June 29, 1906.—During the past year only \$407.42 was applied for material, which exhausted the appropriation. The system may be reported as in good and serviceable condition. The keyless-door attachments installed on the fire-alarm boxes are working satisfactorily.

Extension of gas plant, act June 29, 1906.—\$4,961.50 have been expended upon this object of appropriation. This amount was used principally in converting old gas plant into electric drive. The unexpended balance of this appropriation, \$7,038.50 was returned to the Treasury March 1, 1910, together with \$232.60 in hands of yard paymaster.

Grading, to extend, act March 2, 1907.—Necessary grading was done on the western extension of the yard. This exhausts the appropriation.

Storage bins for perishable material, act May 13, 1908.—The actual work of erecting this building was commenced in March, 1909, but was not completed at date of last report. The building was completed in September, 1909.

Yard wall, to complete, act June 29, 1906.—This object of work was completed during May, 1910.

Quay wall, to complete, act May 13, 1908.—This object of appropriation is not yet fully completed. Work on this extension of the wall easterly is in progress and will be pushed forward as rapidly as practicable, as the material is on hand to do the work.

Electric-light plant, extension, act May 13, 1908.—Expenditures were for extending the electric-lighting system in places not heretofore supplied and for making electric connection with workbenches. Old material was utilized as far as practicable.

Improvement to storehouse for guns and mounts, act March 3, 1909.—Work on this object of appropriation is in progress and being pushed forward as rapidly as practicable, and will be completed at the earliest possible moment.

Improvements to building No. 118, act March 3, 1909.—The expenditure for labor and material upon this object during the year was incurred in concreting the basement and fitting up cases in the engine room for the reception of waste and other engine-room material.

Fireproof storehouse for fuses, acids, and oils, act March 3, 1909.—The erection of this building is being brought forward as rapidly as practicable. The walls are up, the steel roof trusses are in place, and the work of putting on the concrete roof by the contractor is now in progress.

Water system, to extend, act June 29, 1906.—The chief expenditure during the past year chargeable to this object of appropriation was for material purchased to extend the system west to Fourth street gate and to the water front.

Improvement to building No. 41, act March 3, 1909.—The improvement was completed under contract No. 1391 with the Penn Bridge Company, at a cost of \$20,000.

Summary of expenditures.

Navy-yard.	Public works	Repairs and preservation.	Maintenance.	Contingent.	Total.
Annapolis, Md.			\$682.08		\$682.08
Boston, Mass.	\$187,094.42	\$31,253.37	128,027.16		346,374.95
Cavite, P. I.	10,875.09	29,846.06	43,325.32	\$6,260.07	90,306.54
Culebra, P. R.	3,617.42	503.62	2,369.93		6,490.97
Charleston, S. C.	142,065.55	17,332.35	81,258.05	508.22	241,164.17
Guam	39,186.05	16,436.28	41,025.92	377.96	97,026.21
Honolulu, Hawaii	989,702.11	9,399.00	31,233.55		1,030,334.66
Guantanamo, Cuba.	2,412.68	2,920.16	10,411.32		15,744.16
Key West, Fla.	134,499.68	7,913.24	24,894.05		170,246.21
Mare Island, Cal.	578,911.52	55,526.71	160,385.34	300.00	795,223.57
Las Animas, Colo. (hospital)			196.65		196.65
New London, Conn.			2,420.50		2,420.50
Newport, R. I.	3,096.34	4,819.57	6,605.28		14,521.17
New Orleans, La.	55,677.08	8,892.41	38,233.87	996.99	103,800.35
New York, N. Y.	1,053,728.73	142,867.25	239,484.92	5,686.75	1,441,728.73
Norfolk, Va.	469,222.65	105,709.39	180,689.92	4,282.61	750,904.57
Olongapo, P. I.	78,749.85	16,170.31	49,320.12	7,386.71	151,626.99
Pacific naval district.			25.90		25.90
Port Royal, S. C.		1,133.14			1,133.14
Pensacola, Fla.	5,464.77	14,898.48	22,051.59		42,414.84
Philadelphia, Pa.	446,582.01	45,152.00	142,246.33		633,980.34
Portsmouth, N. H.	52,127.69	39,741.87	121,982.70	507.72	214,359.98
Puget Sound, Wash.	596,553.71	31,439.76	107,640.63	719.78	736,353.88
Sacketts Harbor, N. Y.		1,728.31	379.60		2,107.91
San Francisco (training station)			304.12		304.12
San Juan, P. R.		7,595.37	13,385.56		20,980.93
Sitka, Alaska.		49.00	300.00		349.00
Tiburon, Cal. (coal depot)			592.80		592.80
Tutuila, Samoa.	3,848.61	6,686.48	14,514.22		25,049.31
Washington, D. C.	78,511.36	44,605.17	103,775.21		227,191.74
Total	4,932,227.32	642,619.30	1,567,962.62	29,966.05	7,172,736.37

PUBLIC WORKS, BUREAU OF MEDICINE AND SURGERY.

(A) During the fiscal year ended June 30, 1910, the bureau prepared plans and specifications for, and supervised the construction of the following works, which have been commenced or completed:

Location and character.	Contract price.
Portsmouth, N. H.: New hospital—administration, two wards, and operating and subsistence buildings	\$286,326.66
Chelsea, Mass.: New hospital—administration, two wards, and operating and subsistence buildings	281,189.00
Newport, R. I.: New hospital—administration, two wards, and operating and subsistence buildings	279,583.66
Brooklyn, N. Y.: Addition to female nurses' quarters	9,246.00
Alterations in hospital.	5,400.00
Medical supply depot and lumber storage shed	6,310.00
Washington, D. C.: Seven buildings, including three officers' quarters, two quarters for male and female nurses, sick officers' ward and contagious ward	237,870.00
Additions to power plant and distributing systems	33,266.00
Elevators in sick officers' quarters and contagious ward	7,394.99
Philadelphia, Pa.: Kitchen equipment in hospital	5,375.00
Annapolis, Md.: Three sets of officers' quarters, female nurses' quarters, and stable	91,600.00
Mare Island, Cal.: Hydrotherapeutic apparatus in hospital	4,042.00
Las Animas, Colo.: Remodeling oil heating system	10,000.00
Extension of power plant	3,000.00
Repairing and renovating Kit Carson House	1,141.75
Three additional quarters for sick officers. (By yard labor.)	10,060.00
Total	1,271,798.06

(B) During the fiscal year the bureau was engaged in the preparation of plans and specifications for the following works:

(a) Plans and specifications completed but construction not commenced June 30, 1910.

(b) Plans and specifications in process of preparation and over 75 per cent completed June 30, 1910.

(c) Plans and specifications in process of preparation and under 75 per cent completed June 30, 1910.

Location and character.	Estimated cost.
<i>Class a.</i>	
Brooklyn, N. Y.:	
Contagious ward.....	\$75,000.00
Mortuary.....	2,500.00
Washington, D. C.:	
Animal house.....	5,000.00
Garage.....	1,950.00
Mare Island, Cal.:	
Female nurses' quarters.....	17,500.00
Total.....	101,950.00
<i>Class b.</i>	
Newport, R. I.:	
Contagious ward.....	75,000.00
Medical officer in command's quarters.....	18,000.00
Two junior officers' quarters (\$15,000 each).....	30,000.00
Stable.....	15,000.00
Total.....	138,000.00
<i>Class c.</i>	
Newport, R. I.:	
Power house and laundry.....	\$30,000.00
Power and laundry equipment.....	45,000.00
Pearl Harbor, Hawaii:	
Hospital—Administration building, wards, operating and subsistence building, etc.....	300,000.00
Mare Island, Cal.:	
Converting gas house into employees' quarters.....	8,500.00
Total.....	383,500.00
Total, classes (a), (b), (c).....	623,450.00

(C) In addition to the above the bureau prepared numerous studies and preliminary plans for various projected works, the principal items of which are as follows:

Location and character.	Approximate cost.
Brooklyn, N. Y.:	
Hospital—Building was measured throughout and sketches prepared by the bureau for the rehabilitation thereof.....	\$175,000.00
Portsmouth, N. H.:	
Medical officer in command's quarters.....	18,000.00
Contagious ward.....	75,000.00
Two junior officers' quarters (each \$15,000).....	30,000.00
Female nurses' quarters.....	25,000.00
Power house and laundry.....	30,000.00
Power and laundry equipment.....	45,000.00
Chelsea, Mass.:	
Power house and laundry.....	30,000.00
Power and laundry equipment.....	45,000.00
Stable.....	15,000.00
Annapolis, Md.:	
Addition to power house for coal-storage purposes.....	15,000.00
Puget Sound, Wash.:	
Medical officer in command's quarters.....	13,500.00
Two junior officers' quarters (each \$9,500).....	19,000.00
Newport, R. I.:	
Stable.....	15,000.00
Norfolk, Va.:	
Medical officer in command's quarters.....	18,000.00
Two junior officers' quarters (each \$15,000).....	30,000.00
Total.....	598,500.00

(D) During the fiscal year the bureau has supervised the construction by contract of the following works, plans and specifications for which were completed by the bureau prior to the commencement of the fiscal year ended June 30, 1910:

Location and character.	Contract price.
Brooklyn, N. Y.: Remodeling of contagious ward for female nurses' quarters.....	\$5,858.00
Philadelphia, Pa.: Remodeling the existing hospital building.....	156,440.00
Remodeling power house.....	18,687.00
Washington, D. C.: Macadam roadway.....	9,950.00
Annapolis, Md.: One general ward and two isolation wards.....	84,581.85
Puget Sound, Wash.: New hospital—one ward, one administration, and one operating and subsistence building.	143,971.00
Las Animas, Colo.: Brig and mortuary.....	3,600.00
Five sick officers' quarters, infirmary, and subsistence building.....	35,228.00
Telephone exchange.....	3,000.00
Garage.....	1,975.00
Kitchen equipment in sick officers' quarters.....	1,653.00
Extension of sewer and water systems.....	6,800.00
Kitchen equipment.....	2,367.23
Painting shingle roofs.....	2,328.00
Artesian well and connections.....	3,815.00
Extension to men's infirmary.....	38,000.00
Total.....	518,254.08

(E) During the fiscal year the bureau has carried on the following works by yard labor:

Location and character.	Completed June 30, 1910.	Cost.
Mare Island, Cal.: Addition to hospital for surgical ward, operating pavillion, and nurses' quarters.....	<i>Per cent.</i> 90	\$73,000.00
New Orleans, La.: Dispensary (plans and specifications prepared by yard).....	75	8,500.00
Philadelphia, Pa.: Disinfecting building (plans prepared at yard; work done by yard labor and superintendence by bureau).....	100	10,000.00
Las Animas, Colo.: Extension to heating system.....	100	30,000.00
Extension to water system.....	100	25,000.00
Total.....		146,500.00

SUMMARY.

[Cost, contract or estimated.]

Item A.....	\$1,271,798.06
Item B.....	623,450.00
Item C.....	598,500.00
Item D.....	518,254.08
Item E.....	146,500.00
Total.....	3,158,502.14

APPENDIXES.

The papers which accompany copy of this report are as follows:

- No. 1. Report of expenditures at navy-yards and stations during the fiscal year ended June 30, 1910.
- No. 2. Detailed report from navy-yards and stations of expenditures under appropriation "Repairs and preservation, navy-yards and stations," during the fiscal year ended June 30, 1910.
- No. 3. Detailed report from navy-yards and stations of expenditures under appropriation "Maintenance, yards and docks," during the fiscal year ended June 30, 1910.
- No. 4. Report of expenditures and appropriation for salaries for Bureau of Yards and Docks during the fiscal year ended June 30, 1910.
- No. 5. Statement of appropriations for Bureau of Yards and Docks, showing amounts appropriated, obligated, and remaining unobligated June 30, 1910, under each specific head of appropriation.
- No. 6. Tabulated statement showing the character, value, and condition of property under the cognizance of the Bureau of Yards and Docks at navy-yards and stations June 30, 1910, with summary of values.
- No. 7. List of dry docks and marine railways.

Very respectfully,

R. C. HOLLYDAY,
Chief of Bureau.

The SECRETARY OF THE NAVY.

No. 1.—Report of expenditures (material and labor) at navy-yards and stations, for the fiscal year ended June 30, 1910.

Yard or station.	Public works.	Repairs and preservation.	Maintenance.	Contingent, Yards and Docks.	Total.
Annapolis, Md.....			\$682.08		\$682.08
Boston, Mass.....	\$187,094.42	\$31,253.37	128,027.16		346,374.95
Cavite, P. I.....	10,875.09	29,846.06	43,325.32	\$9,260.07	90,306.54
Culebra, P. R.....	3,617.42	503.62	2,369.93		6,490.97
Charleston, S. C.....	142,065.55	17,332.35	81,258.05	508.22	241,164.17
Guam.....	39,186.05	16,436.28	41,025.92	377.96	97,026.21
Honolulu, Hawaii.....	980,702.11	9,399.00	31,233.55		1,030,334.66
Guantanamo, Cuba.....	2,412.68	2,920.16	10,411.32		15,744.16
Key West, Fla.....	134,499.68	7,913.24	24,894.05	2,939.24	170,246.21
Las Animas, Colo. (hospital).....			196.65		196.65
Mare Island, Cal.....	578,911.52	55,526.71	160,585.34	300.00	795,323.57
New London, Conn.....			2,420.50		2,420.50
Newport, R. I.....	3,096.34	4,819.57	6,605.26		14,521.17
New Orleans, La.....	55,677.08	8,892.41	38,233.87	996.99	103,800.35
New York, N. Y.....	1,053,728.73	142,867.25	239,484.92	5,686.75	1,441,728.73
Norfolk, Va.....	409,222.65	105,709.39	180,689.92	4,282.61	759,904.57
Olongapo, P. I.....	78,749.85	16,170.31	49,320.12	7,386.71	151,626.99
Pacific naval district.....			25.90		25.90
Pensacola, Fla.....	5,464.77	14,898.48	22,051.59		42,414.84
Philadelphia, Pa.....	446,582.01	45,152.00	142,246.33		633,980.34
Port Royal, S. C.....		1,133.14			1,133.14
Portsmouth, N. H.....	52,127.69	39,741.87	121,982.70	507.72	214,359.98
Puget Sound, Wash.....	596,553.71	31,439.76	107,640.63	719.78	736,353.88
Sacketts Harbor, N. Y.....		1,728.31	379.60		2,107.91
San Francisco (training station).....			304.12		304.12
San Juan, P. R.....		7,595.37	13,385.56		20,980.93
Sitka, Alaska.....		49.00	300.00		349.00
Tiburon, Cal. (coal depot).....			592.80		592.80
Tutuila, Samoa.....	3,848.61	6,686.48	14,514.22		25,049.31
Washington, D. C.....	78,811.36	44,605.17	103,775.21		227,191.74
Total.....	4,932,227.32	642,619.30	1,567,962.62	29,966.05	7,172,736.37

No. 2.—Detailed report from navy yards and stations of expenditures (material and labor) under appropriation "Repairs and preservation, navy yards and stations," during the fiscal year ended June 30, 1910.

Items.	Boston.	Cavite.	Charleston.	Culebra.	Guam.	Guan- tanamo.	Hono- lulu.	Key West.	Mare Island.	Newport.	New Orleans.	New York.
Buildings.....	\$11,571.46		\$6,171.63	\$192.63	\$3,782.61	\$1,026.67	\$531.61	\$2,764.67	\$30,122.66	\$4,016.90	\$1,774.56	\$76,985.25
Quarters.....	2,499.43		2,169.97		1,003.59	419.73	481.14	1,678.87	13,122.52	458.69	1,451.49	2,685.85
Water-front improvements.	4,810.10		768.07		39.29	291.02	5,754.48	513.93	644.29			8,967.63
Roads, walks, and gutters.	537.75		1,802.22	300.06	2,661.10		1,733.45	123.79	1,733.45			
Sewer system.....	165.70		187.59		1,000.41			483.38			306.25	
Fences and walls.....	256.84		326.11		272.74		378.48	425.73		95.00	1.00	
Holding apparatus ashore.	276.74							150.90	3,502.72			
Elevators.....									363.09			1,219.21
Floating property.	271.42											8.14
Furnaces and forges.	410.11		313.64				1,667.09		2,899.24			9,892.07
Wacks.....							3.76					
Hoisting apparatus.												
Railroad rolling stock.	26.90											
Dry docks, bays, and grounds.	818.12		1,646.92		211.48	178.37	173.63	249.82		39.50		899.05
Dry docks, body.			745.07									
Dry docks, casisson.			10.88									
Dry docks, pumping plant.			74.88									
Dry docks, other accessories.												
Floating docks, hulls.												16,873.04
Floating docks, machinery plant.												
Floating docks, other accessories.	773.43							19.16				81.58
Marine railways and building ways.	451.88		345.29		19.78							
Power plant, boilers, flues, and stacks.	519.76		119.54		2,327.59						221.09	21,225.26
Power plant, machinery.			296.84		2,215.54						379.22	133.27
Distributing system, heat.			287.68							40.00		
Distributing system, electric.	2,493.36		276.42		136.59		136.59	260.89	1,219.21			52.99
Distributing system, air and hydraulic.			1,280.26		9.15		28.22	948.75	198.17			5.28
Water system.	1,126.07					181.77						518.61
Motors and accessories.												5.64
Transformers.			76.66									
Fire-alarm system.			33.16				2.50					117.61
Telephone and telegraph systems.	2,484.48		368.38		852.08			3.68				1,063.57
Outfits for lighting ships.	228.77		8.87									
Target ranges and apparatus.						46.32						
Indirect labor charges.												
Miscellaneous.....	123.74		212.86	10.83	373.22	153.08		289.67	37.18	169.48	109.73	2,657.90
Total.....	\$31,253.37	29,846.06	17,332.35	503.62	16,436.28	2,920.16	9,399.00	7,913.24	55,536.71	4,819.57	8,892.41	142,867.25

BUREAU OF YARDS AND DOCKS.

Items.	Norfolk.	Olongapo.	Pensacola.	Philadel- phia.	Port Royal.	Porta- mouth.	Puget Sound.	Sacketts Harbor.	San Juan.	Sitka.	Tutunila.	Wash- ington.
Buildings.	\$49,873.11	\$7,474.65	\$4,345.17	\$19,801.42		\$10,227.21	\$21,720.56	\$1,064.31	\$1,260.10		\$2,212.03	\$21,014.73
Quarters	13,283.84	2,805.51	5,033.21	13,034.28		8,958.52	2,502.86		983.68		1,922.70	6,571.56
Water-front improvements.	11,940.60	3,586.73	6,554.55	2,475.52		2,306.33	4,903.93		393.46		767.40	
Roads, walks, and gutters.	3,193.25	1,548.79	622.24	1,983.84		1,750.57	360.72		312.71		125.95	1,379.97
Sewer system.	372.29	145.25	428.20	238.73		317.37	129.61		32.05		48.96	41.04
Fences and walls.	799.24	811.37	811.37	910.82		94.22	2,363.24		978.97		70.14	
Floating apparatus ashore.	198.45	19.82	82.61			138.15			82.94		1.20	
Elevators.						104.16						
Floating property.	3.80	135.46					36.20				57.08	
Furnaces and forges.	840.37	833.27	302.86			2,227.91					297.45	5,735.62
Trucks.	34.40		116.21	2,010.13		12.14	1.79				15.80	62.96
Weighing apparatus.	497.46		12.08	16.09		228.77						
Railroad rolling stock.	8,082.96			25.57		114.14	1,276.38	24.00	901.54		32.64	
Improvement of grounds.	1,898.49					5.71	218.67					
Dry docks, body.	1,479.53											
Dry docks, calsson.	1,225.32											
Dry docks, pumping plant.	5.73			214.11								
Dry docks, other accessories.						4,618.63						
Floating docks, hulls.			3.76									
Floating docks, machinery plant.			3.68									
Floating docks, other accessories.	670.52								20.45		11.30	
Marine railways and building ways.	6,412.76	529.13	131.94			160.03					293.51	
Power plant, boilers, flues, and stacks.	778.35	402.85	51.40	225.91		8.94	53.42		13.18		58.16	17.96
Power plant, machinery.	2,410.95	32.68	8.56	338.96		443.34						616.86
Distributing system, heat.	1,187.46	587.00	432.26	496.96		82.66			1,302.63			5,893.49
Distributing system, electric.	38.97		51.93			319.96						
Distributing system, air and hydraulic.	71.61	367.88	378.65	1,244.42		1,661.64			15.97		304.36	1,462.25
Water system......		.04	89.44									2.24
Motors and accessories.												
Transformers.						10						701.50
Fire-alarm system.		600.70	860.48	1,682.05		1,475.06			11.62		4.93	1,087.52
Telephone and telegraph systems.		36.76	3.68			152.08						
Outfits for lighting ships.												
Outfits for boats and apparatus.									936.80			
Undirect labor charges.								20.00	183.27		459.59	27.77
Miscellaneous	410.23	72.79	464.20	293.81	\$1,133.14	1,270.69					\$49.00	
Total.	105,790.39	16,170.31	14,898.48	45,152.00	1,133.14	39,741.87	31,439.76	1,728.31	7,595.37	49.00	6,686.48	44,605.17

The total expenditures for material and labor under appropriation "Repairs and preservation, navy yards and stations" during the fiscal year ended June 30, 1910, were \$642,619.30.

No. 3.—Detailed report from navy-yards and stations of expenditures (material and labor) under appropriation "Maintenance, yards and docks," for the fiscal year ended June 30, 1910.

Items.	Annapolis.	Boston.	Cavite.	Charleston.	Culebra.	Guam.	Guantanamo.	Honolulu.	Key West.	Las Animas.	Mare Island.	New London.	Newport.	New Orleans.
Ferriage tolls, etc.			\$2,853.05	\$450.40		\$442.95		\$900.00	\$108.71		\$2,700.00			\$316.06
Booked drawings.			6,137.51	4,555.03		398.03		46.84	1,704.53		3,284.01			53.20
Fire protection.				790.18		915.70		489.75	910.72		1,296.57			55.63
Machinery and tools.			1,816.50	3,428.95	\$131.33	9,026.31		132.82	2,684.90		7,788.68			919.68
Live stock.			896.18	1,746.67	203.18	2,632.71		2,684.90			1,450.70		\$470.00	51.78
Vehicles.					55.00		67.53	560.66						
Postage, telegrams, and tele- phone rentals.														121.71
Office supplies.			1,601.44	689.87	51.46	203.51	172.69	563.76	220.36		1,276.96	\$11.94	151.75	108.34
Furniture, office.			1,387.00	3,339.70	62.50	362.45	2.30	423.20	282.37		1,359.54			203.25
Furniture, quarters.			904.65	293.00		1,404.49	55.05	149.22	1,300.81		6,898.74		1,297.70	15,732.04
Power plants.			.84	3,527.88		18,158.77		165.61	655.31		6,416.44			898.55
Distributing systems, heat, light, and power.			1,065.00	1,921.24		17.93			2,111.21		20,632.00	217.30	616.54	628.45
Hoisting apparatus ashore.			295.06	193.09				1.18			570.58			466.12
Elevators.			1,475.33	832.80		18.55		1,205.22			10,133.77			2,820.51
Floating property.			1,957.13	2,992.41	42.30	531.75	119.30	2,801.01	5.47		764.80	144.00		1,579.01
Roads, walks, and sewers.			2,847.32	10,617.02	1,774.76	183.39	101.09	2,764.22	138.44		19,325.34			557.95
Buildings.			883.41	1,719.61		112.80	723.00	10.08			2,774.47		801.54	1,997.88
Rolling stock.				1,368.05	49.40		1,672.11				2,611.67			286.98
Water.				1,368.05				121.50			19,352.84			8.42
Wages and drawings.			131.64	227.32		32.35	1,994.22	70.31	143.04		35.84	67.02		6.88
Accounting.							21.44							2,089.11
Watchman.			3,621.24	5,094.53					2,564.00		1,108.62	700.00		5,568.22
Office force.			6,990.01	6,114.36		2,007.98	1,182.00	20,565.25	9,802.90		16,207.53		475.12	1,887.61
Leave pay.			2,330.37	6,547.84		688.45	394.32	887.92	1,280.14		15,509.00	97.72	173.92	
Lighting ships.			239.68	8,049.85							1,441.00			
Testing and inspecting mate- rials.			.45	117.63					49.64		37.28			
Disposing of ships' refuse.			1.77	79.06							2,969.16			82.66
Disposing of yard refuse.			81.81	2,276.85		639.84		26.50	132.88		314.47			
Removal of ice and snow.														
Water system.			4,964.50	687.80		294.45	1,134.14		297.36		523.52			1,311.86
Telephone and telegraph sys- tems.			1,033.81	351.59			52.74							76.56
Miscellaneous.			990.27	2,791.48		550.62	330.50	36.82	232.14		2,325.93		2,569.15	115.13
Indirect charges.			\$682.08	8,938.99							9,969.29			170.16
Total.	682.08	\$128,027.16	646,487.17	81,258.05	2,369.93	41,025.92	10,411.22	31,223.55	24,891.05	196.65	100,865.34	2,420.50	6,607.26	38,233.87

BUREAU OF YARDS AND DOCKS.

Items.	New York.	Norfolk.	Olongapo.	Peru- cola.	Philadel- phia.	Pacific naval dis- trict.	Porte- mouth.	Puget Sound.	Naval training station, San Fran- cisco.	San Juan.	Sack- ette Har- bor.	Sitka.	Coal depot, Tid- ron.	Tutuila.	Wash- ington.	
Ferriage, tolls, etc		\$1,648.75					\$5,395.40									
Books and drawings.		205.49			\$41.36		396.66			\$30.69					828.16	\$3,084.25
Fire protection.	\$9,388.72	5,369.55	1.72	938.38	11,981.00		2,692.00	\$684.18		3,692.00					329.77	1,215.54
Machinery and tools.	7,069.77	323.17	1.72	546.26	7,564.46		2,694.00	2,074.00		1,953.89					508.86	1,410.19
Live stock.		1,037.03		1,846.26	3,756.46		1,377.32	2,197.66		1,175.61					6,196.08	
Vehicles.		103.75		205.04	4,370.67		612.54	1,710.38		296.82					183.66	1,960.65
Postage, telegrams, and P.O. orders.		60		24			10.50									
Office supplies.		681.90		342.85	849.44		562.88	15.00		51.98					686.59	
Furniture, other.		1,635.51		89.66	2,644.10		1,244.70	606.56		14.70					87.51	1,494.87
Furniture, quarters.		12,149.65		733.45	1,941.70		5,242.51	2,033.29		821.85					8,698.31	
Power plants.		10,501.75		4,845.83	24,867.09		28,405.79			83.95					2,817.19	12,428.23
Distributing systems, heat, light, and power.		8,620.39		158.70	1,247.52		599.38	44,064.61		1,715.44					568.93	17,327.06
Hoisting apparatus ashore.		341.14		2.72	656.76		242.15								154.17	5.67
Elevators.		21,543.88		4,099.23			258.72								343.20	
Floating property.				1,826.31	2,746.85		1,207.03	1,478.77		1,137.74					108.86	210.68
Roads, walks, and sewers.		25,981.05		4,613.73	13,125.53		29.87	1,078.91		1,519.21					2,801.08	3,432.64
Buildings.		12,996.51		1,270.37	6,831.34		3,630.39	3,244.22		812.18					1,380.94	2,929.95
Rolling stock.				337.07	20.09		1,180.47								25.00	
Water.		39,056.38		45.71			13,226.14	8,187.87		111.19					33.50	
Flags and awnings.		54.58		277.45	1,436.19		577.77	399.36		116.65					145.78	683.65
Advertising.				131.85												
Watchman.		8,638.69		690.60			4,230.16	1.39							540.00	
Leave pay.		6,298.18		2,807.64	13,378.45		13,846.38	13,644.70		2,736.53					5,760.31	
Leave force.		12,625.56		1,346.77	15,352.64		9,149.34	8,366.66		822.36					5,028.72	
Lighting ships.				26.94	7.50		231.44	.85								
Test and inspect materials.		345.09		14.16	1,471.82		1,403.16	1,091.81		403.36					2.70	
Disposing of ships refuse.				6.16	1,551.07		710.48	412.11								
Disposing of yard refuse.				3,221.62	1,547.50		6.00									
Repair of keel and mow.				1,070.33	1,137.26		2,891.18			536.70					479.08	
Water system.		10.62		355.81	673.90		603.61	795.98							63.59	153.20
Tape and telegraph systems		3,480.20		474.24	2,136.67		4,147.33	1,290.80		210.88					2,479.25	3,003.68
Miscellaneous		20,148.70		2,910.00	30,048.11		12,591.90	6,105.05							\$900.00	\$992.80
Indirect charges		9,611.39		26,431.73											300.00	
Total.		229,484.92		180,689.92	99,329.12	22,031.59	23.90	121,682.70	107,640.63	304.12	13,385.56	379.60	592.80	14,514.22	103,775.25	

a Cavite, P. I., to be credited with \$3,161.85; make the net expenditure \$63,253.32.

Total expenditures, fiscal year ended June 30, 1910.

Credited with material returned..... \$1,571,126.41
 Total..... 3,161.85
 1 567 064 56

No. 4.—*Report of expenditures under appropriation for salaries for the Bureau of Yards and Docks during the fiscal year ended June 30, 1910.*

Rating and pay of—	Amount appropriated.	Amount expended.
Chief clerk, at \$2,000 per annum.....	\$2,000.00	\$2,000.00
Draftsman and clerk, at \$1,800 per annum.....	1,800.00	1,800.00
Clerk of class 3, at \$1,600 per annum.....	1,600.00	1,600.00
One clerk of class 2, at \$1,400 per annum.....	1,400.00	1,400.00
Clerk of class 1, at \$1,200 per annum.....	1,200.00	1,086.67
One clerk, at \$1,100 per annum.....	1,100.00	1,100.00
Six clerks, at \$1,000 per annum.....	6,000.00	5,827.76
Assistant messenger, at \$720 per annum.....	720.00	694.00
Three messenger boys, at \$600 per annum.....	1,800.00	1,797.66
Two laborers, at \$600 per annum.....	1,200.00	1,320.00
Total.....	18,940.00	18,626.09

No. 5.—*Statement of appropriations for yards and docks, showing amount obligated, appropriated, and remaining unobligated June 30, 1910.*

	No.	Appropriated.	Obligated.	Unobligated balance June 30, 1910.	
Annuals:					
Maintenance, yards and docks, 1910.....		\$1,500,000.00	\$1,500,000.00	.....
(Act Mar. 3, 1909.)					
Maintenance of yards and docks, 1911.....		1,290,000.00	.....	\$1,290,000.00
(Act June 24, 1910.)					
Repairs and preservation, 1910.....		700,000.00	700,000.00	.....
(Act Mar. 3, 1909.)					
Repairs and reservation at navy-yards, 1911.....		700,000.00	.....	700,000.00
(Act June 24, 1910.)					
Contingent, yards and docks, 1910.....		30,000.00	30,000.00	.....
(Act Mar. 3, 1909.)					
Contingent, yards and docks, 1911.....		30,000.00	.....	30,000.00
(Act June 24, 1910.)					
Specials:					
Four timber dry docks—					
Acts May 4, 1898; Mar. 3, 1899; Jan. 25, 1900;					
June 7, 1900; Mar. 3, 1901; July 1, 1902;					
Apr. 27, 1904; and deficiency act, Mar. 4,					
1909—					
Dry dock, Portsmouth (cost, \$1,100,000).....	3	5,290,765.60	1,411,035.61	Completed.	
Dry dock, Boston (cost, \$1,100,000).....	12			Completed.	
Dry dock, League Island (cost, \$1,175,000;	22				
\$236,035.61 additional available).					
Dry dock, Mare Island (cost, \$1,175,000;	20		1,676,644.71	3,065.28	
\$504,729.99 additional).					
Consolidating power plants, navy yards, and stations.....	14	300,000.00	284,303.10	15,696.90	
(Act Apr. 27, 1904.)					
Floating derrick (previous appropriations, \$100,000).....	22	250,000.00	231,896.31	18,103.69	
(Act Mar. 3, 1909.)					
Plans and specifications for public works (previous appropriations, \$165,000).....	23	195,000.00	181,962.40	13,037.60	
(Act Mar. 3, 1909.)					
Navy-yard, Boston, Mass.:					
Act Apr. 27, 1904—					
Wire-rope mill for equipment.....	104	65,000.00	51,020.12	13,979.88	
Act Mar. 3, 1905—					
Track for traveling crane, extension.....	110	163,620.00	160,183.44	3,436.56	
Approach to dry dock No. 1.....	113	43,100.00	42,620.74	479.26	
Oil storehouse.....	114	15,000.00	14,600.27	399.73	
Act June 29, 1906—					
Power house, extension.....	118	39,000.00	36,705.58	2,294.42	
Refuse kiln.....	119	5,300.00	.....	5,300.00
Act Mar. 2, 1907—					
Electric plant, extensions.....	123	101,000.00	100,706.64	293.36	
Heating system, extensions.....	124	17,500.00	17,352.19	147.81	
Salt-water flushing for dry dock No. 2.....	130	2,500.00	2,370.66	129.34	
Improving ropewalk building.....	132	10,000.00	9,909.95	90.05	
Improvements to building No. 42.....	134	9,000.00	8,993.94	6.06	
Act May 13, 1908—					
Railroad rolling stock.....	135	9,000.00	8,201.19	798.81	
Telephone system, extensions.....	136	5,000.00	5,000.00	.....
Repairs to pier No. 1.....	137	5,000.00	4,007.48	992.52	
Underground conduit system, extension.....	140	129,100.00	118,728.60	10,371.40	

No. 5.—Statement of appropriations for yards and docks, showing amount obligated, appropriated, and remaining unobligated June 30, 1910—Continued.

	No.	Appropriated.	Obligated.	Unobligated balance June 30, 1910.
Navy-yard, Boston, Mass.—Continued.				
Act Mar. 3, 1909—				
Power plant, to complete.....	141	\$333,700.00	\$301,602.14	\$32,097.86
Sewer system, extensions.....	143	62,500.00	58,693.87	3,806.13
Improvements to water front.....	144	50,000.00	41,709.19	8,290.81
Ropewalk, fire protection.....	145	10,000.00	4,621.40	5,378.60
Act June 24, 1910—				
Dredging.....	146	72,500.00	67,193.69	5,306.31
Improvements to water front.....	147	115,000.00	41,709.19	73,290.81
Improvements to yard buildings.....	148	15,000.00	.....	15,000.00
Railroad extension.....	149	58,500.00	48,103.51	10,396.49
Paving and grading.....	150	195,000.00	183,359.61	11,640.39
Total.....		1,531,320.00	1,327,293.40	203,926.60
Naval Station, Cavite, P. I.:				
Act Apr. 27, 1904—				
Floating steel dry dock, to continue.....	9	1,225,000.00	1,224,526.52	473.48
Act Mar. 2, 1907—				
Extension of building No. 64.....	11	7,500.00	7,329.69	170.31
Improvement of naval prison.....	13	13,000.00	12,196.72	803.28
Act May 13, 1908—				
Extension of boat-storage shed.....	14	6,000.00	5,999.73	.27
Improvements to central wharf.....	15	5,000.00	148.36	4,851.64
Receiving and shipping shed.....	16	5,500.00	5,499.92	.08
Improvements to buildings Nos. 1, 2, 3, and 4 H.....	17	6,000.00	4,242.89	1,757.11
Improvements to building No. 29.....	18	4,500.00	1,874.54	2,625.46
Lumber shed in building No. 84.....	20	1,700.00	44.37	1,655.63
Improvements to building No. 23.....	21	6,500.00	160.00	6,340.00
Improvements to No. 1 ways.....	22	16,000.00	205.62	15,794.38
Improvements to building No. 83.....	23	3,000.00	1,464.84	1,535.16
Railroad system, extension.....	24	13,000.00	12,948.49	51.51
Act Mar. 3, 1909—				
Improvements to building No. 25.....	25	13,500.00	885.19	12,614.81
Improvements to building No. 21.....	26	2,400.00	.....	2,400.00
Total.....		1,328,600.00	1,277,526.88	51,073.12
Navy-yard, Charleston, S. C.:				
Act Apr. 27, 1904—				
Workshop, to complete.....	29	80,000.00	79,974.37	25.63
Ship fitters' shop for construction and repair, to complete.....	31	200,000.00	184,727.55	15,272.45
Foundry for construction and repair, to complete.....	32	75,000.00	74,869.40	130.60
Storehouse and storekeeper's office, to complete.....	33	100,000.00	99,479.46	520.54
Act Mar. 3, 1905—				
Fire-protection system.....	41	5,000.00	3,930.35	1,069.65
Act June 29, 1906—				
Water system, extension.....	46	100,000.00	99,319.43	680.57
Piers and slips.....	47	123,000.00	122,741.14	258.86
Interior fittings, machine shop for construction and repair.....	51	98,000.00	97,791.34	208.66
Foundry and copper shop, to complete.....	52	94,000.00	93,826.46	173.54
Interior fittings, equipment building.....	53	8,500.00	5,908.19	2,591.81
Dry-dock latrines.....	55	3,000.00	2,973.06	26.94
One officers' quarters.....	56	7,000.00	7,000.00	.....
Dispensary building.....	57	12,000.00	11,998.36	1.64
Act Mar. 2, 1907—				
Stone and concrete dry dock, to complete.....	58	1,250,000.00	1,246,919.82	3,080.18
Railroad system, extensions.....	60	40,000.00	40,000.00	.....
Railroad equipment.....	65	15,000.00	14,807.92	192.08
Electric system, extension.....	68	10,000.00	9,466.47	533.53
Act May 13, 1908—				
Sewer system, extension.....	69	27,000.00	23,353.81	3,646.19
Heating system, extensions.....	70	35,000.00	16,739.65	18,260.35
Completing power plant.....	71	100,000.00	83,353.40	16,646.60
Elevator and interior fittings, building No. 7.....	73	17,000.00	12,743.67	4,256.33
Clearing yard.....	75	5,000.00	4,208.01	791.99
Act Mar. 3, 1909—				
Paving and grading, to continue.....	76	75,000.00	73,260.66	1,739.34
Underground conduit system, extension.....	77	30,000.00	22,817.54	7,182.46
Intercepting drain.....	78	30,500.00	29,333.76	1,166.24
Pneumatic system, extension.....	79	5,000.00	3,528.80	1,471.20
Dredging, to continue.....	80	133,000.00	132,916.02	83.98
Increasing and improving torpedo-boat slips.....	81	100,000.00	98,386.50	1,613.70
Total.....		2,778,000.00	2,696,374.94	81,625.06

No. 5.—Statement of appropriations for yards and docks, showing amount obligated, appropriated, and remaining unobligated June 30, 1910—Continued.

	No.	Appropriated.	Obligated.	Unobligated balance June 30, 1910.
Naval station, Culebra, P. R.:				
Act Mar. 2, 1907—				
Fencing.....	2	\$500.00	\$333.26	\$166.74
Act May 13, 1908—				
Clearing and cleaning station.....	3	4,500.00	2,497.28	2,002.72
Improvements, water system.....	5	1,000.00	1,236.89	363.11
Sewer system.....	6	2,000.00	.....	2,000.00
Fire-protection system.....	7	2,000.00	.....	2,000.00
Total.....		10,000.00	4,067.43	6,532.57
Government landing, Newport, R. I.:				
Act Mar. 2, 1907—				
Steel floats, fences, dredging, and general improvements.....	1	7,840.00	5,585.32	2,214.68
Naval station, Guam:				
Act May 13, 1908—				
Fire-protection system.....	13	7,000.00	1,403.10	5,596.90
Extension of telephone system.....	14	1,500.00	1,146.00	354.00
Act Mar. 3, 1909—				
Dredging.....	15	23,500.00	18,178.91	5,321.09
Extension of naval-station roads.....	16	36,000.00	25,042.03	10,957.97
Deficiency act June 25, 1910—				
For completion of water-supply system.....	18	55,000.00	28,495.48	26,504.52
Total.....		123,000.00	74,265.52	48,734.48
Naval station, Guantanamo, Cuba:				
Act Apr. 27, 1904—				
Dry dock.....	2	200,000.00	199,535.07	464.93
Dredging at Toro Key.....	3	40,000.00	30,745.70	9,254.30
Sea wall at Toro Key.....	4	75,000.00	44,478.06	30,521.94
Reservoir and water system.....	5	50,000.00	49,812.32	187.68
Total.....		365,000.00	324,571.15	40,428.85
Naval station, Key West, Fla.:				
Act Mar. 3, 1905—				
Fire-protection system, extension.....	28	13,000.00	12,804.23	195.77
Pumping plant for fresh water.....	29	5,000.00	4,856.34	144.66
Act of June 29, 1906—				
Sewer system.....	35	3,000.00	2,989.14	10.86
Act March 2, 1907—				
Dredging and filling in.....	36	120,000.00	116,084.99	3,915.01
Grading and paving.....	37	5,000.00	4,676.30	323.70
Sidewalks along outside station wall on government property.....	38	2,500.00	1,774.35	725.65
Water system, extensions.....	39	36,000.00	35,379.41	620.59
Removing steel tanks from Dry Tortugas.....	40	10,000.00	7,810.36	2,189.64
Act Mar. 3, 1909—				
Latrines.....	41	5,000.00	4,522.25	477.75
Concrete cistern.....	42	25,000.00	19,957.65	5,042.35
To complete marine railway.....	43	35,000.00	33,143.92	1,856.08
Deficiency act June 25, 1910—				
Quay wall, to continue.....	44	137,767.22	.....	137,767.22
Total.....		397,267.22	243,997.84	153,269.22
Navy-yard, Mare Island, Cal.:				
Act Apr. 27, 1904—				
Dry-dock water-closets and bath house, to complete.....	120	12,000.00	4,902.64	7,097.36
Act Mar. 3, 1905—				
For the purpose of preparing and equipping yard for the construction of vessels.....	145	175,000.00	174,525.21	474.79
Act Mar. 2, 1907—				
Electric plant system, extension.....	156	115,000.00	113,695.66	1,304.34
Heating system, extension.....	158	20,000.00	18,625.02	1,374.98
Electric capstans for dry dock No. 1.....	160	10,000.00	8,721.60	1,278.40
Improvements to buildings Nos. 69 and 71.....	163	20,000.00	19,943.04	56.96
Improvements to coal cylinders.....	164	7,500.00	7,393.21	106.79
Channel moorings, Mare Island Strait.....	166	9,000.00	6,620.28	2,379.72
Improvements to naval prison.....	168	50,000.00	49,997.59	2.41
Act May 13, 1908—				
Railroad system, extension.....	171	55,000.00	54,990.60	3.40
Telephone system, extension.....	172	4,000.00	3,953.37	46.63
Grading and paving, extension.....	174	15,000.00	13,878.46	1,121.54
Quay wall, extension.....	175	80,000.00	49,981.83	30,018.17
Dredging.....	177	190,000.00	189,860.43	139.57

No. 5.—Statement of appropriations for yards and docks, showing amount obligated, appropriated, and remaining unobligated June 30, 1910—Continued.

	No.	Appropriated.	Obligated.	Unobligated balance June 30, 1910.
Navy-yard, Mare Island, Cal.—Continued.				
Act Mar. 3, 1909—				
Central power plant at Mare Island Navy-Yard, Cal., to complete.....	179	\$495,000.00	\$335,419.46	\$159,580.54
New elevators in buildings Nos. 69 and 71.....	180	9,000.00	8,337.62	662.38
Sewer system, extension.....	181	42,000.00	33,773.88	8,226.12
Repairs to building No. 116.....	182	3,500.00	49.34	3,450.66
Crane track, extension.....	183	75,000.00	64,955.84	10,044.16
Ordinance storehouse.....	185	100,000.00	205.65	99,794.35
Improvements to building No. 69.....	186	4,000.00	3,982.95	17.05
Railroad system, extension.....	187	75,000.00	65,724.85	9,275.15
Deficiency act February 25, 1910—				
Shipwrights' shop for construction and repair.....	188	19,570.56	.....	19,570.56
Light and power station.....	189	28,565.90	.....	28,565.90
Act June 24, 1910—				
Improvement of channel, to continue.....	190	570,000.00	457,905.39	112,094.61
Purchase of dry-dock shed.....	191	2,000.00	.....	2,000.00
Total.....		2,156,136.46	1,687,449.92	468,686.54
Naval station, New Orleans, La.:				
Act Apr. 27, 1904—				
Shops for steam engineering and fittings and grading.....	22	135,000.00	133,798.13	1,201.87
Coal bins.....	31	5,000.00	180.48	4,819.52
Floor, construction and repair shops.....	33	5,500.00	4,702.23	797.77
Fencing naval property.....	34	10,000.00	2,200.17	7,799.83
Act Mar. 3, 1905—				
Water system, extensions.....	41	23,000.00	22,402.67	597.33
Fire-protection system.....	43	10,000.00	8,613.47	1,386.53
Four officers' quarters.....	44	34,000.00	34,000.00	.....
Act June 29, 1906—				
Machinery and tools for yards and docks shop, Sawmill, boat shop, and storage for construction and repair.....	47	8,000.00	764.08	7,235.92
Act Mar. 2, 1907—				
Central electric light and power plant, extension.....	58	262,500.00	218,376.01	44,123.99
Railroad system.....	59	40,000.00	38,869.50	1,130.50
Paving.....	62	50,000.00	49,908.75	91.25
Fitting up yard buildings 8 and 16.....	63	4,300.00	2,317.88	1,982.12
Dispensary building.....	64	9,000.00	8,947.87	52.13
Act May 13, 1908—				
Drainage system, to continue.....	65	38,000.00	36,371.69	1,628.31
Central heating plant, extension.....	66	38,000.00	28,956.33	9,043.67
Underground conduit system.....	67	15,000.00	14,656.39	343.61
Improvements to machine shop, building No. 4.....	68	6,000.00	.....	6,000.00
Sewer system, extensions.....	69	25,000.00	21,150.22	3,849.78
Improvements to river front.....	70	229,500.00	225,676.09	3,823.91
Act Mar. 3, 1909—				
Levee improvements and grading.....	71	120,000.00	105,170.09	14,829.91
Act June 24, 1910—				
Power house and plant.....	72	64,677.71	.....	64,677.71
Total.....		1,192,477.71	959,914.44	232,563.27
Navy-yard, New York, N. Y.:				
Act Apr. 27, 1904—				
Cranes.....	128	7,500.00	3,652.73	3,847.27
Act Mar. 3, 1905—				
Latrines, additional.....	144	4,000.00	2,875.31	1,124.69
Scale house and scales.....	146	6,000.00	3,917.61	2,082.39
Auxiliary hoist for 100-ton crane.....	147	20,000.00	17,852.56	2,147.44
Act June 29, 1906—				
Extension salt-water suction and discharge pipes to power house.....	156	9,000.00	.....	9,000.00
Street-cleaning equipment.....	157	3,000.00	1,819.16	1,180.84
Lean-to for building No. 20.....	158	3,000.00	1,996.58	1,003.42
Lean-to for building No. 131.....	159	10,000.00	3,441.02	6,558.98
Act Mar. 2, 1907—				
Heating system, extensions.....	163	20,000.00	17,263.98	2,736.02
Electric motors for pump-well valves.....	164	7,000.00	3,412.45	3,587.55
Electric elevators.....	165	10,000.00	8,739.39	1,260.61
Sidewalk on Flushing avenue and Navy street.....	167	10,800.00	10,800.00	.....
Cement storehouse.....	171	11,000.00	.....	11,000.00

No. 5.—Statement of appropriations for yards and docks, showing amount obligated, appropriated, and remaining unobligated June 30, 1910—Continued.

	No.	Appropriated.	Obligated.	Unobligated balance June 30, 1910.
Navy-yard, New York, N. Y.—Continued.				
Act May 13, 1908—				
Electric plant, extensions.....	172	\$215,000.00	\$215,000.00	.....
Underground conduits, extension.....	173	110,000.00	110,000.00	.....
Railroad equipment, additional.....	175	35,000.00	30,659.13	\$4,340.87
Sewers and drains.....	176	40,000.00	32,157.17	7,842.83
Railroad system, extensions.....	177	81,000.00	80,922.56	77.44
Repairs to roofs of buildings.....	178	20,000.00	18,645.51	1,354.49
Telephone system, extensions.....	179	26,000.00	23,448.99	2,551.01
Reconstructing roof, power house No. 41.....	180	33,000.00	31,457.93	1,542.07
Extending chemical laboratory.....	181	6,000.00	5,095.69	904.31
Act Mar. 3, 1909—				
Central power plant, to complete.....	183	371,000.00	306,565.51	64,434.49
Act June 24, 1910—				
Dry dock No. 4, to continue (limit increased to \$2,500,000).....	187	1,400,000.00	1,400,000.00	.....
Improvement of water front.....	188	406,122.00	141,364.64	264,757.36
To complete cement shed.....	189	1,000.00	.....	1,000.00
Total.....		3,065,422.00	2,682,087.92	383,334.08
Navy-yard, Norfolk, Va.:				
Act Apr. 27, 1904—				
Renewing wharves at entrance to dry docks..	91	15,000.00	11,208.53	3,791.47
Electric crane in erecting shop.....	99	15,000.00	10,220.48	4,779.52
Act Mar. 3, 1905—				
Locomotive.....	109	6,000.00	5,983.52	16.48
Underground conduit system.....	110	10,000.00	9,969.32	.68
Wharf extension at St. Helena.....	114	8,500.00	8,500.00	.....
Roads at St. Helena.....	115	4,000.00	4,000.00	.....
Act June 29, 1906—				
Fire-protecting system, extensions.....	120	40,000.00	39,998.33	1.67
Boilers and capstans for dry docks.....	123	5,000.00	4,950.00	50.00
Improvements to 40-ton locomotive crane....	124	4,000.00	3,038.22	961.78
Act Mar. 2, 1907—				
Rebuilding coal wharf.....	130	25,000.00	785.39	24,214.61
Machine shop for steam engineering, to complete.....	133	135,000.00	132,196.62	2,803.38
Concrete and granite dry dock, to complete..	134	1,200,000.00	1,200,000.00	.....
Improvements to 100-ton shears, to complete.	135	35,000.00	.....	35,000.00
Act May 13, 1908—				
Telephone system, extensions.....	139	18,500.00	15,237.17	3,262.83
Central power plant, to complete.....	142	530,000.00	505,702.61	24,297.39
Railroad rolling stock.....	144	29,000.00	19,994.96	9,005.04
Extension of wharf at dry dock No. 3.....	145	50,000.00	41,455.88	8,544.12
Dry kiln for construction and repair.....	148	7,500.00	50.40	7,449.60
Renew roof of foundry, building No. 22, steam engineering.....	149	8,000.00	7,250.42	749.58
New roof and crane for building No. 23, steam engineering.....	150	60,000.00	399.64	59,600.36
Elevator in buildings Nos. 11, 13, 14, 17, and 33.	151	20,000.00	19,638.33	361.67
Naval-supply storehouse (to cost \$450,900)....	152	50,000.00	.....	50,000.00
Improvements to building No. 16, complete..	153	55,000.00	54,912.21	87.79
Heating building No. 37, steam engineering....	154	7,500.00	5,637.09	1,862.91
Act Mar. 3, 1909—				
Locomotive crane.....	162	50,000.00	42,984.10	7,015.90
Act June 24, 1910—				
Railroad tracks, extensions.....	165	58,000.00	46,605.73	11,394.27
Electric-light plant, extensions.....	166	155,000.00	98,307.76	56,692.24
Repairs, building, St. Helena.....	167	125,000.00	100,285.02	24,714.98
Dredging, to continue.....	168	140,000.00	109,020.38	30,979.62
Compressed-air system, extensions.....	169	30,000.00	19,848.73	10,151.27
Improvements to water front.....	170	300,000.00	192,104.30	107,895.70
To enlarge dry dock No. 3.....	171	550,000.00	.....	550,000.00
Crane track around dry dock No. 3, to continue	172	40,000.00	18,520.70	21,479.30
Paving and grading.....	173	90,000.00	57,776.67	32,223.33
Power plant, coal storage.....	174	25,000.00	.....	25,000.00
Electric motors for pumping plants, dry docks Nos. 1 and 2.....	175	35,000.00	.....	35,000.00
Water-closets and lavatories in yard shops....	176	25,000.00	.....	25,000.00
Heating system, extensions.....	177	45,000.00	29,156.19	15,843.81
Total.....		4,006,000.00	2,815,867.70	1,190,132.30
Naval station, Olongapo, P. I.:				
Act Apr. 27, 1904—				
To complete survey of reservation (previous work under allotments).....	1	20,000.00	18,420.02	1,579.98
Commandant's quarters.....	4	9,000.00	8,991.14	8.86
Three officer's quarters.....	5	18,000.00	17,981.66	18.34

No. 5.—Statement of appropriations for yards and docks, showing amount obligated, appropriated, and remaining unobligated June 30, 1910—Continued.

	No.	Appropriated.	Obligated.	Unobligated balance June 30, 1910.
Naval station, Olongapo, P. I.—Continued.				
Act Apr. 27, 1904—Continued.				
Dredging entrance to basin.....	8	\$7,500.00	\$3,792.34	\$3,707.66
Dredging basin in front of quay walls.....	9	48,000.00	46,662.05	1,337.95
Water supply from brickyard springs.....	10	15,895.00	15,895.00	.....
Galvanized-iron pipe.....		\$5,225.00		
Valves and fittings.....		250.00		
Freight and transportation.....		720.00		
Distribution in yard.....		1,500.00		
Laying pipes.....		3,200.00		
Temporary reservoir.....		5,000.00		
One pier for landing and receiving stores.....	11	100,000.00	92,789.96	7,210.04
Toward coaling plant.....	12	500,000.00	499,870.01	129.99
Act Mar. 3, 1905—				
Repairs to existing buildings.....	13	75,000.00	73,009.43	1,990.57
Roads and bridges.....	16	5,000.00	4,985.84	14.16
Sewer system.....	17	15,000.00	9,401.60	5,598.40
Tools for general use.....	18	2,000.00	1,941.75	58.25
Holisting machinery.....	19	4,000.00	3,162.78	837.22
Rock crusher and appurtenances.....	20	4,000.00	4,000.00	.....
Act June 29, 1906—				
Purchase and installation of tools and machinery.....	21	100,000.00	94,174.53	5,825.47
Wharf for floating dry dock.....	22	65,000.00	65,000.00	.....
Extension of drainage canal.....	23	75,000.00	75,000.00	.....
Steam floating derrick.....	24	17,000.00	17,000.00	.....
Act Mar. 2, 1907—				
Water system.....	25	100,000.00	100,000.00	.....
Quay walls.....	26	113,000.00	40,510.92	72,489.08
Act May 13, 1908—				
Improvement and development of the naval station.....	27	100,000.00	71,971.46	28,028.54
Total.....		1,303,395.00	1,264,560.49	128,834.51
Naval station, Pearl Harbor, Hawaii:				
Act of May 13, 1908—				
Toward erecting machine shops (to cost \$300,000).....	15	100,000.00	71.15	99,928.85
Storehouses (to cost \$300,000).....	16	100,000.00	54.40	99,945.60
Act of June 24, 1910—				
Dredging.....	21	2,800,000.00	2,800,000.00	.....
Dry dock, to continue (limit \$2,700,000).....	22	1,500,000.00	1,500,000.00	.....
Toward yard development of naval station.....	23	235,000.00	65,237.73	169,762.27
Total.....		4,735,000.00	4,365,363.28	369,636.72
Navy-yard, Pensacola, Fla.:				
Act Apr. 27, 1904—				
Dredging, to continue.....	17	80,000.00	76,641.06	3,358.94
Act Mar. 3, 1905—				
Central power house, to complete.....	22	108,500.00	108,196.55	303.45
Closets and lavatories.....	26	3,500.00	3,449.80	50.20
Garbage crematory.....	27	7,500.00	7,201.81	298.19
Elevator for building No. 1.....	31	1,000.00	.....	1,000.00
Act June 29, 1906—				
Sewer system.....	33	10,000.00	9,557.21	442.79
Act Mar. 2, 1907—				
Conduit system.....	37	10,000.00	8,110.23	1,889.77
Improvements to storehouse, building No. 25.....	38	5,000.00	4,782.21	217.79
Hurricane damages.....	39	200,000.00	170,533.43	29,466.57
Act May 13, 1908—				
Machinery for central power plant.....	40	115,000.00	102,988.57	12,011.43
Water system.....	41	35,000.00	34,362.43	637.57
Railroad track and equipment.....	42	30,000.00	28,964.55	1,035.45
Tools for yards and docks.....	43	7,600.00	5,889.35	1,710.65
Act Mar. 3, 1909—				
Remodeling building No. 29.....	44	15,000.00	.....	15,000.00
To repair rifle range and wharf.....	45	5,000.00	63.42	4,936.58
Act June 24, 1910—				
Elevator for building No. 1.....	46	2,000.00	.....	2,000.00
Total.....		635,100.00	560,740.62	74,359.38
Navy-yard, Philadelphia, Pa.:				
Act Apr. 27, 1904—				
Fittings and modifications, dry dock and pumping plant.....	117	40,000.00	40,000.00	.....
Electric plant, extensions.....	121	275,000.00	275,000.00	.....

No. 5.—Statement of appropriations for yards and docks, showing amount obligated, appropriated, and remaining unobligated June 30, 1910—Continued.

	No.	Appropriated.	Obligated.	Unobligated balance June 30, 1910.
Navy-yard, Philadelphia, Pa.—Continued.				
Act Mar. 3, 1905—				
Grading and paving, to continue.....	133	\$95,000.00	\$94,992.90	\$7.10
Pump and boiler for caisson, dry dock No. 1..	147	2,000.00	456.57	1,543.43
Act June 29, 1906—				
Sewer system, extensions.....	150	47,000.00	44,186.41	2,813.59
Fire-protection system, extensions.....	152	110,000.00	109,943.39	56.61
Electric capstan for dry dock No. 1.....	155	3,000.00	2,497.18	502.82
Central heating system.....	156	10,000.00	10,000.00	.....
Act Mar. 2, 1907—				
To continue retaining wall about reserve basin.....	157	340,000.00	333,378.35	6,621.65
Sea-wall extension.....	158	164,000.00	161,090.84	2,939.16
Berth for receiving ship, to extend.....	159	71,000.00	57,101.25	13,898.75
Act May 13, 1908—				
Extension to railroad system.....	161	57,000.00	57,000.00	.....
Act Mar. 3, 1909—				
Central power plant, to complete.....	166	322,600.00	283,482.30	39,117.70
Crane track, extensions.....	168	115,000.00	107,719.82	7,280.18
Paving around piers.....	169	50,000.00	25,108.89	24,891.11
Act June 24, 1910—				
Dredging, to complete.....	170	430,000.00	295,108.89	134,891.11
Total.....		2,131,600.00	1,897,036.79	234,563.21
Navy-yard, Portsmouth, N. H.:				
Act Mar. 3, 1903—				
Removal of Hendersons Point, to complete...	71	749,000.00	749,000.00	.....
Act Mar. 3, 1905—				
Fittings for dry dock No. 2.....	101	35,000.00	34,904.27	95.73
Rebuilding and extending coaling plant.....	105	160,000.00	159,931.93	68.07
Act Mar. 2, 1907—				
Central power plant, to complete.....	124	120,000.00	119,952.20	47.80
Track for 40-ton crane, extension (limit of cost, \$46,800).....	131	56,800.00	56,500.00	300.00
Act Apr. 15, 1908—				
Naval prison fittings.....	132	6,000.00	5,715.02	284.98
Fittings and tools for pattern shop.....	133	29,000.00	25,407.09	3,592.91
Act May 13, 1908—				
Sewer system, extension.....	134	32,000.00	27,197.13	4,802.87
To complete blasting in front of quay wall....	135	195,000.00	194,428.69	571.31
Storehouse for combustibles.....	136	30,100.00	22,683.88	7,416.12
Railroad, extension.....	137	56,000.00	54,451.87	1,548.13
Heating system, extension.....	138	95,000.00	85,715.01	9,284.99
Electric plant, extension.....	139	115,000.00	113,485.21	1,514.79
Steam main central power plant to steam engineering plant.....	140	9,000.00	5,709.08	3,290.92
Naval prison, extension.....	141	65,000.00	60,488.50	4,511.50
Improvement 100-ton shears.....	143	6,047.80	6,009.67	38.13
Act Mar. 3, 1909—				
Rebuilding and fireproofing building No. 20..	144	43,500.00	26.88	43,473.12
Electric capstan for quay wall.....	145	3,000.00	.....	3,000.00
Foundry building (to cost \$250,000).....	146	50,000.00	348.25	49,651.75
Act June 24, 1910—				
Quay walls, to continue.....	147	428,250.00	379,276.82	48,973.18
To repair the old highway bridge.....	148	7,000.00	.....	7,000.00
Total.....		2,290,697.80	2,101,231.50	189,466.30
Navy-yard, Puget Sound, Wash.:				
Act Apr. 27, 1904—				
Yard scow, to complete.....	116	3,500.00	2,623.69	876.31
Pile driver.....	121	2,500.00	2,218.85	281.15
Fire-alarm system.....	122	5,000.00	4,561.44	438.56
Act Mar. 3, 1905—				
Fire-protection system, extensions.....	127	34,000.00	32,600.41	1,399.59
Boat shop for construction and repair, to equip and complete.....	131	200,000.00	200,000.00	.....
Locomotive and crane track about dry dock, to continue.....	134	150,000.00	149,882.53	117.47
Joiner shop, for construction and repair, to complete.....	138	95,000.00	94,978.02	21.98
Machinery for yards and docks.....	139	2,000.00	1,346.75	653.25
Piers, additional.....	140	175,000.00	173,879.46	1,120.54
Act June 29, 1906—				
Dredging, to continue.....	146	40,000.00	39,989.76	10.24
Water-closet for ships in dock.....	152	2,500.00	2,500.00	.....
Act Mar. 2, 1907—				
To continue grading.....	153	110,000.00	109,970.62	29.38
Quay wall, extensions.....	159	185,000.00	179,006.24	5,993.76

No. 5.—Statement of appropriations for yards and docks, showing amount obligated, appropriated, and remaining unobligated June 30, 1910—Continued.

	No.	Appropriated.	Obligated.	Unobligated balance June 30, 1910.
Navy-yard, Puget Sound, Wash.—Continued.				
Act May 13, 1908—				
Electric-light plant, extensions.....	160	\$35,000.00	\$11,455.60	\$23,544.40
Water system, extensions.....	161	48,500.00	42,598.62	5,901.38
Heating system, extensions.....	162	36,000.00	35,189.03	810.97
Telephone system, extensions.....	165	14,000.00	11,758.95	2,241.05
Central power plant, extensions.....	167	300,000.00	288,309.91	11,690.09
Hard-wood lumber shed.....	168	20,000.00	18,229.00	1,771.00
Water-closet for ships in dock.....	169	12,000.00	11,278.27	721.73
Oil house.....	170	30,000.00	82.51	29,917.49
Dry kiln.....	171	6,000.00	2.24	5,997.76
Underground conduit system.....	172	15,000.00	9,287.85	5,712.15
Electric elevator and fittings, building No. 59.	173	8,000.00	4,159.47	3,840.53
Act Mar. 3, 1909—				
Sewer system, extensions.....	176	34,000.00	24,447.53	9,552.47
Railroad and equipment, extensions.....	177	72,000.00	70,282.06	1,717.94
General storehouse (to cost \$260,000).....	178	100,000.00	.....	100,000.00
Pier No. 8.....	179	75,000.00	.....	75,000.00
Pattern shop.....	180	40,000.00	.....	40,000.00
Two officers' quarters.....	181	18,000.00	.....	18,000.00
Warrant officers' quarters.....	182	4,000.00	.....	4,000.00
Act June 24, 1910—				
Dry dock, to continue (limit of cost, \$2,300,000).	183	1,400,000.00	1,400,000.00	.....
Storehouse, to complete.....	184	200,000.00	.....	200,000.00
Foundry, to complete.....	185	175,000.00	143.65	174,856.35
Total.....	.....	3,707,000.00	2,920,872.46	786,127.54
Naval station, Tutuila:				
Act Mar. 2, 1907—				
Barracks for native guard.....	19	5,000.00	4,896.48	103.52
Operating room.....	20	1,000.00	995.68	4.32
Act May 13, 1908—				
Dispensary and sick quarters.....	21	15,000.00	5,831.54	9,168.46
Act Mar. 3, 1909—				
Two officers' quarters.....	22	3,500.00	.....	3,500.00
Preservation of grounds.....	23	2,000.00	1,192.31	807.69
Total.....	.....	20,500.00	12,916.01	13,583.99
Navy-yard, Washington, D. C.:				
Act Apr. 27, 1904—				
Coal storage and handling plant for new power plant.....	48	334,132.00	334,132.00	.....
Telephone and time systems, extensions.....	58	2,000.00	2,000.00	.....
Act June 29, 1906—				
Railroad system, to extend.....	74	5,000.00	5,000.00	.....
Water system, to extend.....	76	35,000.00	26,992.35	8,007.65
Yard wall, to complete.....	77	72,000.00	71,966.70	33.30
Act Mar. 2, 1907—				
Railroad bridge and tracks.....	84	40,000.00	4,237.48	35,762.52
Act May 13, 1908—				
Quay wall, to complete.....	85	125,000.00	121,353.29	3,646.71
Storage bins for perishable material.....	86	6,000.00	6,000.00	.....
Machinery for power-plant extension.....	87	229,200.00	224,407.18	4,792.82
Electric-light plant, extension.....	88	15,000.00	11,564.03	3,435.97
Act Mar. 3, 1909—				
Improvements to storehouse for guns and motins.....	89	7,000.00	5,213.40	1,786.60
Concrete roof for foundry buildings.....	90	15,000.00	.....	15,000.00
Improvements to building No. 118.....	91	3,000.00	2,133.52	866.48
Improvements to building No. 41.....	92	20,000.00	20,000.00	.....
Fireproof storehouse for fuses, acids, and oils.....	93	15,000.00	9,115.72	5,884.28
Act June 24, 1910—				
Dredging.....	94	10,000.00	.....	10,000.00
Purchase of land.....	95	136,000.00	.....	136,000.00
Total.....	.....	1,069,332.00	844,115.67	225,216.33

No. 6.—Statement showing character, value, and condition of the

BOSTON.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Officers' quarters.</i>					
A	Mail messenger.....	Brick.....	Granite.....	2	Slate on wood.
B	Inspection officer.....	do.....	Brick.....	2	do.....
C	Construction officer.....	do.....	Granite.....	2	do.....
D	Aide to commandant.....	do.....	do.....	2	do.....
E	Assistant to engineer officer.....	do.....	do.....	2	do.....
F	General storekeeper.....	do.....	do.....	2	do.....
G	Commandant.....	do.....	do.....	3	do.....
H	Commanding officer, marines.....	do.....	do.....	4	do.....
I	Marines.....	do.....	do.....	4	do.....
K	Officers of marines.....	do.....	do.....	4	do.....
L	Captain of yard.....	do.....	do.....	3 2	do.....
M	Civil engineer.....	do.....	do.....	3 2	do.....
N	Engineer officer.....	do.....	do.....	3 2	do.....
O	Surgeon.....	do.....	do.....	3 2	do.....
Total.....					
<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
1	.....	Brick.....	Granite.....	1	Slate on wood.
4	Storehouse.....	do.....	Rubble.....	2	Tin on wood.
5	Pay office, labor board, dental office.....	do.....	do.....	3	Slate on wood.
10	Storehouse.....	do.....	Concrete.....	2	do.....
16	do.....	Wood.....	Posts.....	1	Corrugated iron.
19	Seale house.....	do.....	Granite posts.....	2	Tin on wood.
20	Commandant's barn.....	do.....	Granite.....	1	Shingled.....
21	Commandant's watchhouse.....	Stone.....	do.....	1	Slate on wood.
22	Storehouse.....	do.....	do.....	3 1	do.....
23	Latrine.....	Brick.....	Concrete.....	1	do.....
24	Offices, carpenters', etc.....	Stone.....	Pile.....	2	do.....
28	Lunch room.....	Brick.....	do.....	2	do.....
31	Telephone exchange, offices, and chemical laboratory.....	do.....	Granite and pile.....	3	do.....
32	Commandant's office.....	do.....	Pile.....	1	do.....
33	Storehouse and sail loft.....	Stone.....	Stone and pile.....	3	do.....
34	Storehouse.....	do.....	do.....	3	do.....
36	Joiner shop.....	do.....	do.....	3	do.....
38	General storekeeper's offices and naval prison.....	do.....	do.....	3	do.....
39	Accounting department and inspection office.....	Brick.....	do.....	3	Tin on wood.
40	Chain and anchor shop.....	do.....	Pile and concrete.....	1	Slate on concrete.
	(Offices, shops.....	do.....	Stone and pile.....	3	Tin on concrete.
	Foundry.....	do.....	do.....	1	do.....
42	Machine shop.....	do.....	do.....	3	Slate on concrete.
	Old E. chain shop.....	do.....	do.....	1	Slate on wood.
	Boiler shop.....	do.....	do.....	1	do.....
	Do.....	do.....	do.....	3	do.....
43	Power substation.....	do.....	Granite and pile.....	1	do.....
44	Warrant offices, storehouse.....	Wood.....	Posts.....	1	Shingled.....
47	Boatswain's office.....	Brick.....	Piles.....	1	Slate on wood.
48	Magazine.....	do.....	do.....	1	do.....
49	Saluting shed.....	Wood.....	Posts.....	1	Corrugated iron.

buildings at the navy-yard at the end of the fiscal year June 30, 1910.

BOSTON.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
42 0	21 0	20 0	882	1829	1829	Unknown...	\$2,400.00	Good.
16 0	16 0	20 0	256	25,847	1879	Unknown...		Do.
32 0	24 0	26 0	768	35,232	1840	Unknown...	5,000.00	Do.
17 0	24 0	28 0	408	800	1876	Unknown...	4,800.00	Do.
32 0	25 0	26 0	800	41,600	1840	Unknown...	4,800.00	Do.
25 0	24 0	28 0	600	41,600	1872	Unknown...	4,800.00	Do.
32 0	25 0	26 0	800	36,896	1840	Unknown...	5,000.00	Do.
25 0	24 0	28 0	600	36,896	1872	Unknown...	5,000.00	Do.
32 0	25 0	26 0	800	107,980	1840	Unknown...	15,000.00	Do.
24 0	18 0	28 0	432	62,200	1878	Unknown...	7,500.00	Do.
32 0	25 0	26 0	800	3,507	1823	Unknown...	22,000.00	Do.
24 0	18 0	28 0	432	1,240	1823	Unknown...	7,500.00	Do.
60 0	39 0	40 0	2,340	1,111	1890	Unknown...	8,200.00	Good.
64 2	20 0	44 0	1,284	620	1890	Unknown...	8,000.00	Do.
140 3	25 0	44 0	3,507	58,338	1890	Unknown...	8,000.00	Do.
62 0	20 0	44 0	1,240	58,338	1890	Unknown...	8,000.00	Do.
39 0	28 5	36 0	1,111	58,338	1890	Unknown...	8,000.00	Do.
31 0	20 0	25 0	620	58,338	1890	Unknown...	8,000.00	Do.
39 0	28 5	36 0	1,111	58,338	1890	Unknown...	8,000.00	Do.
31 0	20 0	25 0	620	58,338	1890	Unknown...	8,000.00	Do.
39 0	28 5	36 0	1,111	58,338	1890	Unknown...	8,000.00	Do.
31 0	20 0	25 0	620	58,338	1890	Unknown...	8,000.00	Do.
39 0	28 5	36 0	1,111	58,338	1890	Unknown...	8,000.00	Do.
31 0	20 0	25 0	620	58,338	1890	Unknown...	8,000.00	Do.
39 0	28 5	36 0	1,111	58,338	1890	Unknown...	8,000.00	Do.
31 0	20 0	25 0	620	58,338	1890	Unknown...	8,000.00	Do.
48 7	22 0	14 0	1,071	22,638	1867	Unknown...	100.00	Poor.
53 0	47 0	27 0	2,491	67,257	1827	Unknown...	1,500.00	Fair.
208 0	50 7	29 0	10,546	387,855	1803	Unknown...	20,000.00	Poor.
50 0	35 0	24 0	1,750	52,500	1852	Unknown...	3,900.00	Fair.
147 5	50 8	16 0	7,493	119,000	1868	\$2,400.00	500.00	Poor.
45 4	16 6	7 0	754	5,278	1873	4,156.37	2,500.00	Good.
14 0	12 0	17 0	168	3,192	1840	Unknown...	500.00	Fair.
60 4	22 6	9 0	1,365	18,300	1840	Unknown...	800.00	Do.
38 4	28 0	10 0	1,075	16,000	1832	Unknown...	80,000.00	Do.
160 4	40 4	37 0	6,480	273,000	1856	Unknown...	12,000.00	Good.
70 8	41 8	12 0	2,969	36,000	1840	Unknown...	100,000.00	Do.
80 0	30 2	13 0	2,400	42,000	1847	Unknown...	4,500.00	Poor.
200 2	70 1	28 0	14,034	79,300	1850	Unknown...	9,000.00	Fair.
70 5	40 4	26 0	2,848	92,114	1852	10,000.00	5,000.00	Good.
33 3	32 0	42 0	935	45,000	1850	Unknown...	155,000.00	Do.
53 3	33 3	20 0	1,775	42,400	1857	8,674.00	5,000.00	Good.
200 4	65 3	41 0	13,086	750,000	1837	Unknown...	100,000.00	Do.
200 0	49 6	40 0	9,920	500,000	1866	139,066.00	148,000.00	Fair.
280 7	70 6	38 0	19,817	870,000	1854	64,934.00	100,000.00	Good.
76 3	33 3	14 0	2,540	50,000	1866	163,800.00	130,000.00	Fair.
200 4	50 4	43 0	10,100	508,000	1866	163,800.00	130,000.00	Fair.
24 4	19 3	26 0	470	13,200	1866	163,800.00	130,000.00	Fair.
273 0	90 0	41 0	24,570	1,100,000	1866	163,800.00	130,000.00	Fair.
80 4	24 3							
50 1	40 1	13 4	1,954	30,678				
281 2	179 8	23 0	50,567	1,512,670	1904	Unknown...	120,000.00	Good.
208 6	104 4	24 0	21,777	522,000				
210 6	90 6	51 0	19,080	1,202,000				
210 6	90 6	51 0	19,080	1,202,000	1857	629,257.00	550,000.00	Fair.
199 4	65 7	24 0	13,100	420,000				
199 4	65 7	24 0	13,100	420,000				
285 6	64 5	51 0	18,420	1,160,000				
122 6	60 0	18 0	7,356	206,000	1858	Unknown...	10,000.00	Do.
50 6	28 0	14 0	1,418	28,340	1866	1,000.00	500.00	Poor.
37 5	23 5	13 0	881	16,650	1863	6,500.00	1,500.00	Fair.
12 0	12 0	14 0	120	1,900	1863	200.00	450.00	Do.
15 0	31 0	11 5	465	4,650	1906	Unknown...	500.00	Good.
		9 3						

• Of all.

No. 6.—Statement showing character, value, and condition of the buildings

BOSTON—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures—Continued.</i>					
58	Ropewalk	Stone	Granite	{ 1 2	Slate on wood.
		Brick		{ 2 3	do.
60	Tarring house	Stone	Granite	2	do.
62	Hemp house	do.	do.	2	do.
63	Timber shed	Wood	do.	1	do.
64	do.	Stone and wood	do.	1	do.
75	do.	do.	do.	1	do.
76	do.	do.	do.	1	do.
77	Boat shop	do.	do.	{ 1 2	do.
78	Coal shed	do.	None	1	Tar and gravel.
79	Wire-rope mill	Brick	Granite	2	Slate on wood.
80	Kiln furnace	do.	do.	1	None
96	Ropewalk, power house	do.	Concrete and rubble	1	Slate on wood.
97	Gate and entrance house to yard	Brick and stone	Concrete and granite	2	Tar on gravel on concrete.
100	Foreman, laborer office	Corrugated iron	Concrete	1	Corrugated iron.
101	Timber kiln	Brick	do.	1	Slate on wood.
103	Chain and anchor storage shed	Steel and brick	Pile and concrete	2	Slate on concrete.
104	Shipfitters' shop	do.	do.	2	do.
	Smithery	do.	Concrete	2	do.
105	Power house	do.	do.	2	do.
106	Metal workers' shop	do.	do.	2	do.
107	Offices and storeroom	do.	do.	1	do.
	Central power plant	do.	do.	1	Slate on wood.
108	Economizer house	do.	do.	1	Copper
109	Coal storage	Corrugated iron and steel	Concrete and pile	2	Corrugated iron and steel.
110	Litch house	Brick and steel	Concrete	1	Steel
111	Locomotive house	Corrugated iron and wood	Posts	1	Corrugated iron on wood.
113	Millwright's shop	Wood and corrugated iron	None	1	do.
114	Shipwright's shop and boat storage	Brick and steel	Concrete and pile	2	Asphalt and felt on concrete.
115	Testing laboratory	Wood and corrugated iron	Granite and cement	1	Slate on wood.
117	Stables and carriage house	Brick and wood	Concrete	{ 2 1	do.
118	Water-closets	Brick	do.	1	Tin
119	do.	do.	do.	1	do.
120	Dispensary	do.	do.	2	Tin on wood.
121	Oil tanks	do.	do.	1	Concrete
122	Rifle range	Wood	Wood	1	Rubberoid
123	Pump house	Brick	Concrete	1	Glass and tin on cement.
124	Latrine	do.	do.	1	Tin on wood.
125	Paint shop	do.	Pile and concrete	2	Tin on concrete.
126	Water-closets	do.	Concrete	1	Tin on wood.
127	do.	do.	do.	1	do.
128	Scale house	Wood	Stone	1	Slate on wood.
129	Wireless station	do.	do.	1	Shingled
130	Tackle storage	Iron and wood	Sea wall	2	Galvanized iron on wood.
131	Oil storeroom	Concrete	Pile and concrete	1	Plastic slate on concrete.
132	Wire-rope mill	Brick	Concrete	2	Slate on concrete.

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

BOSTON—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
473 0	45 0	9 0	21,285	344,193				
		21 0	38,700	958,000				
780 0	45 0	21 0	2,851	75,600	1836.....	Unknown...	\$275,000.00	Fair.
46 6	61 2	32 0	4,222	160,000				
60 4	69 9	20 0	4,774	110,400	1838.....	Unknown...	40,000.00	Do.
217 0	22 0	31 0	8,506	313,000	1837.....	Unknown...	65,000.00	Good.
140 6	60 5	16 0	27,000	621,000	1848.....	Unknown...	38,000.00	Fair.
450 0	60 0	16 0	27,000	621,000	1848.....	Unknown...	38,000.00	Do.
450 0	60 0	16 0	27,000	621,000	1848.....	Unknown...	38,000.00	Do.
450 0	60 0	16 0	27,000	621,000	1848.....	Unknown...	38,000.00	Do.
450 0	60 0	16 0	27,000	621,000	1848.....	Unknown...	38,000.00	Do.
77 8	27 1	17 0	2,280	42,000	1848.....	Unknown...	195,000.00	Do.
450 0	60 0	32 0	81,000	1,117,800				
95 3	30 0	10 0	2,859	28,590	1866.....	Unknown...	300.00	Poor.
187 0	38 3	27 0	7,160	242,804	1852.....	Unknown...	30,000.00	Fair.
17 0	13 0	25 0	174	4,100	1866.....	Unknown...	100.00	Do.
120 9	44 6	20 0	5,392	150,000	1899.....	\$15,000.00	14,000.00	Good.
52 0	50 0	28 5	2,600	79,610	1903.....	25,000.00	22,000.00	Do.
50 0	30 2	16 5	1,516	30,320	1900.....	Unknown...	2,000.00	Fair.
62 7	34 0	10 0	2,132	25,600	1900.....	Unknown...	1,500.00	Do.
450 0	60 0	34 5	27,000	1,296,000	1900.....	90,000.00	95,000.00	Good.
450 0	110 0	41 6	49,500	1,500,000	1903.....	200,000.00	195,000.00	Do.
329 0	110 0	41 6	36,190	1,080,000				
26 0	92 0	19 9	2,392	64,800	1904.....	200,000.00	195,000.00	Do.
95 0	110 0	41 6	10,450	322,200				
450 0	110 0	41 6	49,500	1,500,000	1903.....	200,000.00	195,000.00	Do.
340 0	60 0	34 0	20,400	816,000				
26 0	54 5	34 0	1,417	59,405				
119 0	60 0	36 7	6,805	248,800				
115 6	54 2	31 0	6,235	195,200	1904.....	205,000.00	195,000.00	Do.
84 0	31 0	23 0	2,825	64,975				
314 0	92 0	28 0	26,588	750,000	1904.....	167,000.00	165,000.00	Do.
15 5	16 0	8 0	264	2,500	1901.....	Unknown...	500.00	Do.
30 0	20 0	14 5	600	9,600	1901.....	456.00	300.00	Poor.
60 0	25 0	10 0	1,500	18,000	1901.....		1,500.00	Good.
110 0	65 0	50 0	31,900 7,200	2,000,000	1904.....	200,000.00	195,000.00	Do.
23 0	9 3	8 0	214	2,140	1899.....	Unknown...	200.00	Fair.
75 3	32 0	19 0	2,408	63,210	1902.....	7,500.00	5,000.00	Do.
75 3	15 5	12 0	3,048	37,973				
32 3	25 0	9 8	385	4,800	1901.....	2,500.00	2,000.00	Good.
39 3	15 0	13 5	599	9,600				
39 3	13 0	13 5	511	8,000	1902.....	2,500.00	2,000.00	Do.
54 5	35 5	30 0	2,104	73,338	1905.....	12,000.00	10,000.00	Do.
73 7	20 0	3 3	1,474	15,000	1902.....	Unknown...	2,800.00	Do.
70 0	12 0	11 0	840	10,815	1902.....	589.54	500.00	Fair.
(a)	(b)	16 8	1,576	90,000			(b)	Good.
37 3	15 7	12 5	511	7,800	1904.....	2,685.00	2,000.00	Do.
113 0	56 0	35 0	6,328	175,000	1906.....	35,000.00	35,000.00	Do.
37 7	13 7	11 5	516	6,860	1904.....	2,850.00	2,500.00	Do.
27 4	13 7	12 0	375	5,250	1904.....	2,065.00	2,000.00	Do.
12 3	9 3	8 7	114	1,220	1904.....	400.00	400.00	Do.
24 5	10 4	7 7	255	2,365	1904.....	3,385.00	3,000.00	Fair.
40 0	30 0	16 0	1,200	24,000	1901.....		500.00	Do.
76 0	51 0	18 0	3,900	90,000	1910.....	13,661.00		Good.
151 0						(c)		
139 0	50 3	29 6	8,600	330,000				

a Diameter, 44 feet 8 inches.

b Included with dry dock No. 2.

c Contract price, \$49,500.

No. 6.—Statement showing character, value, and condition of the buildings

BOSTON—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures—Continued.</i>					
133	Coke shed.....	Galvanized iron and wood.	Stone.....	1	Galvanized iron.
134	Power house for U. S. S. Wabash.....	do.....	do.....	1	do.....
135	Refuse kiln.....	Brick.....	Piles and concrete.	1	Corrugated iron.
136	Marine administration building.....	Brick and concrete.	Concrete....	4	Tin on wood..
	Total.....				
	Grand total.....				

CAVITE.

<i>Officers' quarters.</i>					
A	Quarters and offices.....	Stone and wood.	Stone.....	2	Corrugated iron
B	Captain of yard's quarters.....	Brick and wood.	do.....	1½	do.....
E	Quarters and stores.....	do.....	do.....	2	do.....
44	Officers' quarters.....	Stone.....	do.....	1	Tile.....
45	do.....	do.....	do.....	1	do.....
	Total.....				
<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
C	Shipwright's shop.....	Iron and brick.	Stone.....	1	Corrugated iron
D	Barracks.....	Stone.....	do.....	1	do.....
G	Naval prison.....	Brick.....	Brick and stone.	1	do.....
H	Office and storehouse.....	Wood and stone.	Stone.....	2	do.....
1	Storehouse.....	do.....	do.....	2	do.....
2	do.....	do.....	do.....	2	do.....
3	do.....	do.....	do.....	2	do.....
4	do.....	do.....	do.....	2	do.....
5	Machine shop.....	Wood.....	do.....	1	Rubberoid....
6	do.....	Stone and wood.	do.....	2	Corrugated iron
7	Blacksmith shop.....	do.....	do.....	1	do.....
8	Copper shop.....	do.....	do.....	1	do.....
9	Foundry.....	do.....	do.....	1	do.....
12	Pattern shop.....	Wood and stone.	do.....	1	do.....
13	Torpedo-testing room.....	do.....	do.....	1	do.....
14	do.....	do.....	do.....	1	do.....
15	W. O. club, masons and laborers' office, shipkeepers, and stores.	do.....	do.....	2	Rubberoid....
16	Storehouse.....	Wood.....	do.....	1	Corrugated iron
18	Steam-engineering laborers' office and pattern storage.	Brick and wood.	do.....	1	do.....
19	Storehouse.....	do.....	do.....	1	do.....
20	Officers' club.....	Wood and stone.	Stone.....	1	Corrugated iron.
21	Boat shop and block and cooper shop.	Iron and wood.	do.....	1	do.....
22	Power house for ways and electroplating shop.	Wood.....	Concrete.....	1	do.....
		do.....	do.....	1	Rubberoid....
		Brick.....	Stone.....	1	Corrugated iron.
		Stone, wood, and iron.	do.....	1	do.....
23	Boiler and plate shop and covered ways	do.....	do.....	1	do.....
		do.....	do.....	1	do.....
		do.....	do.....	1	do.....
24	Hull division office and drafting room and accounting office.	Wood and brick.	do.....	1	Tiled.....
25	Torpedo and charging station for submarines and stores.	do.....	do.....	1	Corrugated iron.
26	Gunboat pay office and stores.....	do.....	do.....	1	do.....
27	Joiner shop and central power house.	Wood.....	Concrete.....	1	do.....
		do.....	do.....	1	do.....
		do.....	do.....	1	do.....
29	Shipfitter's shop.....	do.....	Stone.....	1	do.....

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

BOSTON—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i> 70 0	<i>Ft. in.</i> 33 0	<i>Ft. in.</i> 10 0	<i>Sq. ft.</i> 2,310	<i>Cu. ft.</i> 34,650	1905.....	Unknown...	\$1,200.00	Good.
61 0	24 0	14 0	1,464	25,000	1906.....	do	1,000.00	Do.
31 0	22 0	11 0	682	7,500	.....	(a)	.....	.....
57 0	28 0	38 0	1,430	57,000	1909.....	\$18,400.00	18,000.00	Do.
							3,678,000.00	
							3,789,750.00	

CAVITE.

151 0	94 3	26 0	14,232	370,082	1873.....	Unknown...	\$45,000.00	Fair.
75 9	47 9	16 6	3,617	59,680	1873.....	Unknown...	12,000.00	Do.
185 0	36 6	26 6	67,531	78,955	.....	Unknown...	13,000.00	Do.
33 6	28 6	11 0	955	10,505	1874.....	Unknown...	1,500.00	Bad.
30 0	11 6	9 0	345	3,105	1874.....	Unknown...	500.00	Do.
							72,000.00	
132 0	132 0	14 6	17,424	252,648	1884.....	Unknown...	35,000.00	Fair.
175 0	41 0	9 6	7,175	68,163	.....	Unknown...	10,000.00	Do.
53 3	27 3	14 0	1,423	19,922	1900.....	Unknown...	6,500.00	Good.
64 6	41 0	24 0	2,580	61,920	1878.....	Unknown...	11,500.00	Fair.
120 0	39 6	24 0	4,740	113,760	1878.....	Unknown...	14,500.00	Do.
120 0	39 6	24 0	4,740	113,760	1878.....	Unknown...	14,500.00	Do.
120 0	39 6	24 0	4,740	113,760	1878.....	Unknown...	14,500.00	Do.
120 0	39 6	24 0	4,740	113,760	1878.....	Unknown...	14,500.00	Do.
146 0	50 0	14 6	7,399	106,357	1849, 1904.....	Unknown...	4,000.00	Do.
139 0	32 6	23 0	4,517	103,891	1849, 1865.....	Unknown...	7,500.00	Do.
124 0	57 0	20 0	7,068	129,000	1849, 1865.....	Unknown...	10,000.00	Do.
86 0	75 0	20 0	6,450	129,000	1871.....	Unknown...	10,000.00	Do.
108 0	92 0	14 6	9,936	144,072	1871.....	Unknown...	12,000.00	Do.
36 0	27 0	13 0	972	12,636	1871.....	Unknown...	1,500.00	Bad.
69 0	43 9	10 6	3,019	31,700	1871.....	Unknown...	5,000.00	Do.
70 4	43 9	10 6	3,077	32,359	1870.....	Unknown...	5,000.00	Do.
44 0	23 0	18 0	1,012	20,240	1904.....	Unknown...	2,000.00	Fair.
175 0	16 6	8 0	2,887	23,100	1902.....	Unknown...	2,000.00	Poor.
71 0	58 6	10 0	4,047	38,979	1886.....	Unknown...	4,000.00	Fair.
115 0	69 0	9 3	7,682	71,058	1885.....	Unknown...	9,000.00	Do.
55 0	23 0	9 0	1,265	11,385	1885.....	Unknown...	2,400.00	Do.
355 0	44 6	15 0	16,376	245,640	1860.....	Unknown...	10,500.00	Do.
13 0	44 6	15 0	560	9,520	1904.....	Unknown...	600.00	Do.
40 0	20 0	9 9	800	9,600	1904.....	\$600.00	550.00	Do.
49 9	98 0	16 0	4,889	78,224	1880.....	Unknown...	13,000.00	Do.
231 0	38 0	21 0	8,778	184,338	.....	.....	.....	.....
185 0	38 9	21 0	7,168	150,528	1884.....	Unknown...	25,000.00	Do.
153 0	19 6	8 9	2,983	26,099	.....	.....	.....	.....
24 9	19 6	7 6	463	3,622	.....	.....	.....	.....
134 0	85 6	14 6	9,457	137,126	1891.....	Unknown...	22,000.00	Do.
154 0	56 6	10 9	8,701	95,537	1882.....	Unknown...	2,000.00	Very bad.
58 0	21 6	12 6	1,247	15,587	1884.....	Unknown...	3,000.00	Fair.
113 0	50 0	15 0	5,650	84,750	1902.....	.....	.....	.....
113 0	32 3	15 0	3,644	54,660	.....	Unknown...	17,000.00	Do.
167 0	32 3	15 0	5,386	80,790	1904.....	.....	.....	.....
160 0	76 0	18 0	12,160	219,560	1902-1904.....	Unknown...	24,000.00	Do.

* Contract price, \$4,700.

No. 6.—Statement showing character, value, and condition of the buildings

CAVITE—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures—Continued.</i>					
30	Plumbing and sheet-metal shop.....	Wood	Stone and concrete.	1	Corrugated iron.
		.....do.....	.....do.....	1	.....do.....
31	Storehouse.....	.....do.....	.....do.....	1	.....do.....
32	Rigging loft.....	Stone.....	Stone.....	1	.....do.....
33	Cement storehouse.....	Wood.....	Concrete.....	1	.....do.....
37	Electrical machine shop.....	.....do.....	.....do.....	1	.....do.....
38	Sail loft, inspection, office, and storehouse.	Stone.....	Stone.....	1	Rubberoid.....
41	Outside foreman's office, general storekeeper.	Wood.....	Concrete.....	1	.....do.....
42	Stores.....	.....do.....	Stone.....	2	Corrugated iron.
46	Machine shop.....	.....do.....	.....do.....	1	.....do.....
48	Naval prison.....	Stone and wood.....	.....do.....	1	Rubberoid.....
50	Board room.....	Stone.....	.....do.....	1	Tile.....
52	Stores for tugs and launches.....	.....do.....	.....do.....	1	.....do.....
55	Yards and docks office and drafting room and chronometer room.	Wood.....	Stone.....	1	Rubberoid.....
56	Chart room.....	Stone and wood.....	.....do.....	2	.....do.....
57	Yard police.....	Stone.....	.....do.....	1	Tile.....
58	Storeroom.....	Brick.....	.....do.....	1	Corrugated iron.
59	.....do.....	.....do.....	.....do.....	1	.....do.....
60	Kitchen to "B".....	Wood and brick.....	.....do.....	1	Tile.....
61	Water-closet to "B".....	Wood and iron.....	.....do.....	1	Corrugated iron.
62	Saw-filing room.....	Wood.....	Wood.....	1	.....do.....
63	Paint shop.....	.....do.....	Stone.....	1	.....do.....
64	Storehouse.....	.....do.....	Concrete.....	1	Paper.....
65	.....do.....	.....do.....	.....do.....	1	.....do.....
		.....do.....	Stone.....	1	Corrugated iron.
66	Yard dispensary and surgeon of yards quarters.	.....do.....	Concrete.....	2	.....do.....
67	Band stand.....	.....do.....	.....do.....	1	.....do.....
68	Fire-engine house.....	.....do.....	Stone.....	1	.....do.....
69	Ship-fitter shop.....	.....do.....	.....do.....	1	.....do.....
70	(Demolished.)				
71	Chapel and library.....	Stone and wood.....	.....do.....	1	.....do.....
72	Ship-fitter shop.....	Wood.....	Concrete.....	1	.....do.....
73	Shipwrights' shop.....	.....do.....	.....do.....	2	.....do.....
74	Storehouse.....	.....do.....	.....do.....	1	.....do.....
75	Pump house and laundry.....	.....do.....	.....do.....	1	.....do.....
76	New naval prison.....	Brick and wood.....	.....do.....	1	.....do.....
77	Sand bin.....	Wood.....	.....do.....	1	.....do.....
78	Pattern shop.....	Stone and wood.....	Stone.....	1	.....do.....
79	.....do.....	.....do.....	.....do.....	1	.....do.....
80	Storehouse.....	Wood.....	Concrete.....	1	Paper.....
81	Wireless station.....	.....do.....	.....do.....	1	Rubberoid.....
82	.....do.....	.....do.....	.....do.....	1	.....do.....
83	Battery house, electrical shop, and brass foundry.	.....do.....	.....do.....	1	.....do.....
84	Guardhouse and storehouse post-office.	Stone and wood.....	Stone.....	1	Tile and corrugated iron.
85	Club for enlisted men.....	.....do.....	.....do.....	2	Tile.....
86	Bowling alleys, club for enlisted men.	Wood.....	.....do.....	1	Corrugated iron.
87	Clearing room "A".....	.....do.....	Concrete.....	1	Rubberoid.....
88	Storehouse.....	Stone.....	Stone.....	1	Tile.....
89	Chief petty officer's mess hall.....	.....do.....	.....do.....	1	.....do.....
90	Special duty marine barracks.....				
91	Marine quartermaster storehouse.....				
92	Sand bin.....	Wood.....	Concrete.....	2	Corrugated iron.
93	Clearing room "B".....	.....do.....	Wood.....	1	Rubberoid.....
95	Angle-iron rack.....	Iron and wood.....	Concrete.....	1	Corrugated iron.
96	Storehouse.....	Stone and wood.....	Stone.....	1	.....do.....

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

CAVITE—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i> 120 0	<i>Ft. in.</i> 46 0	<i>Ft. in.</i> 18 0	<i>Sq. ft.</i> 5,520	<i>Cu. ft.</i> 182,480	1902.....	\$10,697.00		
105 0	25 0	16 0	2,625	44,600			\$13,000.00	Fair.
45 0	22 0	10 0	990	13,860	1907.....			
29 6	16 0	11 0	472	5,192	1901.....	450.00	50.00	Poor.
95 0	56 0	11 10	4,613	58,441	1901.....			
34 0	23 0	11 10	782	12,903	1905-1908.....	3,500.00	3,000.00	Fair.
38 6	38 6	11 3	1,483	16,684	1902.....	Unknown...	3,000.00	Do.
91 6	53 6	19 6	4,895	95,452				
53 6	20 0	9 9	1,070	10,432	1905.....	6,600.00	5,500.00	Do.
139 0	60 0	28 0	8,340	233,520	1903.....	28,727.00	20,000.00	Do.
29 0	8 3	7 0	239	1,673	1901.....	Unknown...	50.00	Bad.
29 0	11 3	11 3	326	3,667	1901.....	200.00	50.00	Do.
130 0	42 8	11 0	5,547	61,017	1902.....	3,203.00	1,000.00	Do.
56 3	24 3	9 6	1,354	12,863				
30 0	9 6	8 9	285	2,493	1878.....	Unknown...	2,500.00	Fair.
24 3	17 3	7 6	418	3,153				
24 0	24 0	18 0	576	10,368	1854.....	Unknown...	2,000.00	Do.
12 0	12 0	8 0	144	1,152	1904.....	100.00	50.00	Bad.
42 9	28 9	26 3	1,229	32,261	1870, 1904....	Unknown...	3,500.00	Fair.
28 6	16 6	12 0	470	5,640	1894.....	Unknown...	300.00	Poor.
40 0	21 6	7 9	860	6,665	1884.....	Unknown...	200.00	Do.
66 6	13 6	7 9	898	6,973	1884.....	Unknown...	200.00	Do.
13 3	9 9	8 9	129	1,129	1873.....	Unknown...	100.00	Do.
14 0	9 3	6 6	130	845	1901.....	Unknown...	100.00	Do.
20 0	20 0	7 9	400	3,100	1909.....	Unknown...	200.00	Fair.
45 0	25 0	10 9	1,125	12,094	1903.....	600.00	500.00	Do.
180 0	118 0	20 0	21,240	424,800	1903.....	7,500.00	6,500.00	Do.
152 0	112 0	20 0	17,029	374,528	1907.....	9,854.00	8,854.00	Do.
171 0	45 0	10 0	7,645	76,450	1903.....	7,500.00	6,000.00	Do.
62 0	76 0	22 0	10,032	117,800	1904.....	20,000.00	14,500.00	Do.
25 6	25 6	17 6	661	10,576	1903.....	2,000.00	1,200.00	Do.
30 4	31 0	16 0	840	12,976	1900, 1909.....	Unknown...	600.00	Do.
71 0	22 0	19 0	1,562	29,678	1903.....	Unknown...	1,600.00	Do.
75 0	33 0	13 0	2,475	32,175	Unknown...	Unknown...	3,000.00	Poor.
33 0	30 0	16 0	990	15,840	1904.....	Unknown...	650.00	Fair.
52 0	43 0	23 6	2,236	32,546	1904.....	4,200.00	3,900.00	Do.
119 0	37 0	16 0	4,403	70,448	1905.....	2,500.00	2,500.00	Do.
58 0	45 0	15 0	2,610	39,150	1905.....	1,000.00	1,800.00	Do.
47 9	31 0	14 0	1,480	19,720	1906.....	10,000.00	10,000.00	Good.
48 0	18 0	8 6	864	7,344	1905.....	700.00	500.00	Fair.
116 0	40 0	14 6	4,640	67,280	1905.....	2,700.00	2,700.00	Do.
116 0	40 0	14 6	4,640	67,280	1871.....	Unknown...	1,200.00	Poor.
128 0	66 0	11 0	8,448	92,928	1905.....	3,130.00	2,900.00	Do.
26 6	14 6	9 3	384	3,552	1904.....	800.00	750.00	Fair.
14 0	9 6	7 9	133	1,031	1904.....	200.00	175.00	Do.
91 6	35 8	14 0	3,264	45,696	1873.....	Unknown...	2,800.00	Do.
343 0	155 0	12 0	36,893	553,380	Unknown...	Unknown...	11,000.00	Poor.
165 0	85 0	20 0	11,465	275,160	Unknown...	Unknown...	9,500.00	Fair.
177 0	16 0	10 0	2,832	36,816	1905, 1909....	Unknown...	2,100.00	Do.
20 0	20 0	11 0	400	5,200	1905.....	Unknown...	500.00	Do.
108 0	35 0	18 0	3,780	79,380	Unknown...	Unknown...	5,000.00	Do.
40 0	20 0	12 0	800	11,200	Unknown...	Unknown...	1,000.00	Do.
62 6	19 6	19 6	3,100	33,495	1905, 1907....	1,500.00	1,400.00	Fair.
40 0	20 0	12 0	800	11,200	1906.....	450.00	400.00	Good.
14 6	30 0	12 0	435	6,090	1907.....	75.00	75.00	Do.
28 0	196 0	13 0	5,458	82,320	1905.....	Unknown...	3,800.00	Fair.

No. 6.—Statement showing character, value, and condition of the buildings

CAVITE—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storerooms, offices, and miscellaneous structures—Continued.</i>					
97	Telephone exchange.....	Wood.....	Brick.....	1	Corrugated iron.
98	Abandoned.....	do.....	Concrete.....	1	do.....
99	Gunboat pay office, tailor shop.....	Brick.....	Stone.....	1	do.....
100	Master electrician's quarters, machine division.....	Stone.....	do.....	1	do.....
101	Central wharf, launch office.....	Wood.....	Wood.....	1	Paper.....
102	Plate shed.....	do.....	Concrete.....	1	Corrugated iron.
102	Shelfor shed.....	do.....	do.....	1	do.....
104	Receiving and shipping shed, general storekeeper.....	do.....	do.....	1	do.....
105	Boat-storage shed.....	do.....	do.....	1	do.....
106	Yard dentist.....	do.....	do.....	1	do.....
	Total.....				
	Grand total.....				

CHARLESTON.

<i>Officers' quarters.</i>					
A	Commandant.....	Wood.....	Brick and concrete.	2½	Shingle and tin.
G	Civil engineer.....	do.....	Brick.....	2	Tin.....
C	Naval constructor.....	do.....	Brick and concrete	2½	do.....
	Total.....				
<i>Workshops, storerooms, offices, and miscellaneous structures.</i>					
1	Office building.....	Brick.....	Concrete.....	2	Tile.....
2	Shipfitters' shop.....	Steel and brick.....	Pile and concrete.	2	Copper.....
3	Machine shop.....	do.....	do.....	1	Composition.....
5	Joiner shop.....	do.....	do.....	2	Copper.....
6	Foundry.....	do.....	do.....	1	Slate.....
7	Storehouse and storekeeper's office.....	Concrete and brick.....	do.....	3	Plastic slate.....
8	Workshop.....	Brick and steel.....	do.....	2	Slate.....
9	Machine shop.....	do.....	do.....	1	Copper.....
13	Storehouse for torpedo flotilla.....	do.....	do.....	3	Slate.....
15	Watchhouse and street railway station.....	Wood.....	Wood.....	1	Paroid.....
16	Storekeeper's quarters.....	Wood and brick.....	Brick and wood.....	3½	Tin.....
18	Engineer officer's quarters.....	do.....	do.....	1½	Shingle.....
19	Dispensary.....	Wood.....	Brick and cement.....	2½	Tin.....
27	Latrine.....	Steel and brick.....	Concrete.....	1	Tile.....
32	Central power house.....	do.....	Pile and concrete.	2	Slate.....
38	Oil storage.....	Brick.....	Concrete.....	1	Steel.....
201-B	Dry dock pumping plant.....	Steel.....	do.....	1	Slate and steel.....
311	Tide gauge house.....	Wood.....	Pile.....	1	do.....
462	Wireless telegraph station.....	do.....	Brick.....	1	Paroid.....
1002	Temporary lumber shed.....	do.....	Wood.....	1	do.....
1003	Temporary locomotive shed.....	do.....	do.....	1	Corrugated iron.
1005	Inspector's office.....	do.....	do.....	1	Paroid.....
1006	Five sentry boxes.....	do.....	do.....	1	do.....
1010	Oil storehouse.....	Brick.....	Brick.....	1	Slate.....
1012	Ice house and paint shop.....	Wood.....	do.....	1	Shingle.....
1013	Yards and docks temporary railway tool house.....	do.....	do.....	1	Paroid.....
1014	Temporary power house.....	do.....	Brick.....	1	do.....
1015	Temporary stable.....	do.....	Wood.....	1½	do.....
1017	Gate house.....	do.....	do.....	1	do.....
1018	Wrecking magazine.....	Wood and corrugated iron.	do.....	1	Corrugated iron.

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

CAVITE—Continued.

Length.			Width.			Height of eaves.			Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>						
10 9	16 9	10 0				180		2,160		1907.....	\$375.00	\$375.00	Good.	
16 7	20 6	10 0				338		2,704		1907.....	125.00	100.00	Do.	
9 0	9 10	8 0				89		528		Unknown...	Unknown...	175.00	Do.	
13 10	22 0	9 0				302		2,416		Unknown...	Unknown...	400.00	Fair.	
12 0	8 0	9 8				96		908		1908.....	195.00	195.00	Good.	
74 0	45 0	22 6				3,330		99,910		1908.....	2,750.00	2,750.00	Do.	
44 0	12 0	11 0				528		6,864		1908.....	450.00	425.00	Do.	
112 0	50 0	16 0				5,600		106,400		1909.....	6,000.00	6,000.00	Do.	
201 0	80 0	30 0				16,080		482,400		1909.....	10,000.00	10,000.00	Do.	
22 10	14 0	9 0				276		2,484		Unknown...	Unknown...	600.00	Do.	
												495,774.00		
												567,774.00		

CHARLESTON.

76 0	58 0	33 0				3,115		102,795		Sept. 4, 1905.	\$12,008.00	\$11,525.00	Excellent.
70 0	25 0	30 0				3,150		94,500		Dec. 19, 1903.	7,500.00	8,625.00	Do.
55 0	48 0	30 0				3,111		93,330		July, 1908...	7,000.00	7,000.00	Do.
												27,150.00	
80 0	39 0	33 3				3,120		109,980		Aug. 5, 1905.	35,567.00	34,144.00	Excellent.
325 0	75 0	44 0				35,325		1,670,362		Apr. 17, 1906.	149,300.00	155,596.00	Do.
319 0	176 6	49 0				56,303		2,758,847		Mar., 1905...	112,795.00	110,689.00	Do.
300 0	90 0	43 0				27,000		1,413,488		Aug., 1904...	110,342.00	104,618.00	Do.
261 7	76 4	37 0				20,005		860,215		Apr. 18, 1906.	72,000.00	71,422.00	Do.
189 0	65 0	54 0				12,285		663,390		May 7, 1908...	96,157.00	96,157.00	Do.
324 6	60 0	37 0				19,470		195,090		Aug. 15, 1906	114,924.00	120,147.00	Do.
326 5	101 5												
172 9	101 5	39 0				58,865		2,611,044		Mar. 31, 1906	287,732.00	279,100.00	Do.
130 2	82 4												
207 6	64 0	53 9				14,685		869,181		June 29, 1906	126,701.00	122,900.00	Do.
25 8	14 0	8 8				327		2,834		Aug., 1903...	352.00	246.00	Good.
56 0	32 0	38 0				2,912		98,000		Unknown...	Unknown...	8,241.00	Do.
45 0	37 0	18 0				1,889		41,000		Unknown...	Unknown...	2,300.00	Fair.
84 0	31 0	31 0				3,550		106,500		Dec., 1908...	12,000.00	12,000.00	Excellent.
46 0	33 0	16 0				1,518		27,324		Mar. 28, 1907.	8,640.00	6,700.00	Good.
143 0	115 8	42 9				16,540		922,105			196,675.45	200,000.00	Excellent.
45 0	16 0	10 0				720		14,400		June, 1908...	4,310.00	4,310.00	Do.
51 0	41 0	15 6				1,734		121,380			65,973.00	65,973.00	Do.
												106.00	80.00
48 0	38 0	14 0				1,824		25,536		Aug., 1904...	106.00	80.00	Fair.
25 9	25 9	9 6				663		8,619		June, 1905...	2,010.00	1,708.00	Good.
30 0	30 0	12 0				900		13,950		Feb., 1904...	406.00	300.00	Poor.
												1,946.00	1,552.00
19 0	13 0	8 6				247		2,964		June, 1904...	1,946.00	1,552.00	Fair.
6 0	6 0	8 0				36		288		Dec., 1903...	468.00	310.00	Poor.
8 0	10 0	8 0				80		640		Oct., 1904...	315.00	200.00	Fair.
20 0	28 6	12 0				570		6,840		Unknown...	Unknown...	70.00	Poor.
6 0	8 0	8 0				48		384		.do.	Unknown...	340.00	Fair.
												35.00	Do.
40 0	40 0	17 0				1,600		32,800		May, 1907...	12,465.00	11,220.00	Good.
92 0	27 0	11 0				2,484		35,576		Nov., 1907...	1,454.74	1,425.00	Excellent.
17 3	5 0	12 0				86		1,118		Mar., 1907...	314.00	200.00	Good.
12 0	12 0	10 0				144		1,584		Mar., 1908...	170.70	165.00	Do.

No. 6.—Statement showing character, value, and condition of the buildings

CHARLESTON—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures—Continued.</i>					
1019	Temporary telephone exchange.....	Wood.....	Wood.....	1	Tin.....
1021	Keel block storage.....	do.....	do.....	1	do.....
1022	Temporary tool house.....	do.....	do.....	1	do.....
1023	Temporary cement shed.....	do.....	Brick.....	1	do.....
102	Six hose houses.....	Iron and wood.....	do.....	1	do.....
	Total.....				
	Grand total.....				

CULEBRA.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
1	Office building.....	Brick.....	Stone.....	1	Corrugated iron.
2	General storekeeper storehouse.....	Wood and brick.....	Brick.....	1	do.....
3	Boat shed and shop.....	Corrugated iron.....	Stone.....	1	do.....
4	Equipment stores.....	Wood.....	Wood.....	1	Wood.....
5	Quartermaster store.....	do.....	do.....	1	Corrugated iron.
6	Ordnance shop.....	do.....	do.....	1	do.....
7	Blacksmith shop.....	do.....	do.....	1	do.....
8	Oil house.....	Concrete.....	Concrete.....	1	do.....
9	Tool house.....	Wood.....	Wood.....	1	Wood.....
10	Lavatory.....	do.....	do.....	1	Corrugated iron.
11	Bakery.....	do.....	do.....	1	do.....
12	Barracks.....	do.....	do.....	1	do.....
13	Post exchange.....	do.....	do.....	2	Rubberoid.....
14	Guardhouse.....	do.....	do.....	1	Corrugated iron.
15	Commanding officer's office.....	do.....	do.....	1	do.....
16	Sick quarters.....	do.....	do.....	1	do.....
17	Commissary storehouse.....	do.....	do.....	1	do.....
18	Icehouse.....	Stone and cement.....	Stone and cement.....	1	Stone and cement.
19	Gymnasium.....	Wood.....	Wood.....	1	Rubberoid.....
20	Stable.....	do.....	do.....	1	Corrugated iron.
21	Cold-storage plant.....	Brick and stone.....	Concrete and stone.....	1	do.....
22	Searchlight house.....	Wood.....	Wood.....	1	do.....
23	Test house.....	do.....	do.....	1	Wood.....
24	Magazine, smokeless powder.....	Stone.....	Stone.....	1	Corrugated iron.
25	Magazine, small-arm.....	Wood.....	Wood.....	1	Wood.....
A. M.	Magazine, A Battery.....	do.....	do.....	1	do.....
B. M.	Magazine, B Battery.....	do.....	do.....	1	do.....
CM	Magazine, C Battery.....	do.....	Concrete.....	1	Concrete.....
GM	Magazine, G Battery.....	do.....	Wood.....	1	do.....
HM	Magazine, H Battery.....	do.....	do.....	1	Wood.....
KM	Magazine, K Battery.....	do.....	Concrete.....	1	Concrete.....
DGM	Magazine, dry gun cotton.....	do.....	Wood.....	1	Wood.....
BBM	Magazine, blasting powder.....	do.....	do.....	1	do.....
26	Dwelling, wireless station.....	do.....	Concrete.....	1	Corrugated steel.
27	Engine house, wireless station.....	do.....	do.....	1	do.....
28	Gasoline store, wireless station.....	Concrete.....	do.....	1	Brick, iron girders.
29	Closet, wireless.....	Wood.....	do.....	1	Wood.....
30	Dwelling, coal depot.....	do.....	Wood.....	1	Corrugated iron.
31	Kitchen, coal depot.....	do.....	do.....	1	do.....
32	Engine house, coal depot.....	do.....	Concrete.....	1	do.....
33	Tool house, coal depot.....	do.....	do.....	1	do.....
34	Dwelling house.....	do.....	Wood.....	1	do.....
35	do.....	do.....	do.....	1	do.....
36	do.....	do.....	do.....	1	do.....
37	do.....	do.....	do.....	1	do.....
38	do.....	do.....	do.....	1	do.....
39	do.....	do.....	do.....	1	do.....
	Total.....				

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

CHARLESTON—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
20 0	20 0	8 0	400	3,200	Unknown...	.....	\$212.00	Good.
201 0	43 0	20 0	8,643	216,075	.....	Unknown...	1,100.00	Poor.
20 0	20 0	12 0	400	5,600	.....	Unknown...	70.00	Do.
112 0	55 0	14 0	6,160	86,240	.....	Unknown...	700.00	Do.
8 0	6 0	7 0	48	384	.....	\$360.00	300.00	Good.
							1,414,530.00	
							1,441,680.00	

CULEBRA.

57 0	50 0	11 0	2,850	11,400	1906.....	\$900.00	\$3,500.00	Excellent.
36 0	36 6	12 0	1,680	17,170	Unknown...	Unknown...	600.00	Good.
60 0	55 0	12 0	2,640	40,100	1905.....	1,647.00	2,200.00	Do.
55 0	22 0	8 8	1,210	25,277	1904.....	1,805.00	2,500.00	Do.
42 0	50 0	11 0	3,380	21,000	1904.....	Unknown...	800.00	Do.
41 0	45 0	6 10	199	2,358	1903.....	Unknown...	150.00	Fair.
20 0	24 0	10 0	480	4,800	1904.....	Unknown...	125.00	Do.
20 0	8 0	9 0	160	1,440	1904.....	Unknown...	30.00	Good.
20 0	8 0	9 0	160	1,440	1904.....	Unknown...	30.00	Do.
25 0	20 0	10 0	554	5,000	1904.....	Unknown...	165.00	Do.
28 0	21 0	9 0	490	2,646	1904.....	Unknown...	175.00	Do.
308 0	20 0	9 0	8,448	57,600	1903.....	Unknown...	4,500.00	Do.
32 6	40 0	16 0	1,560	18,432	1905.....	1,200.00	1,500.00	Do.
43 0	27 0	10 0	1,419	11,610	1904.....	Unknown...	300.00	Fair.
16 6	30 0	11 0	573	5,181	1904.....	Unknown...	200.00	Do.
28 0	39 0	11 0	1,030	11,330	1904.....	Unknown...	750.00	Good.
42 0	50 0	11 0	3,380	21,000	1904.....	Unknown...	875.00	Do.
14 0	16 0	9 6	224	840	1906.....	Unknown...	200.00	Do.
50 0	38 0	10 0	1,900	19,000	1907.....	300.00	500.00	Excellent.
12 0	50 0	10 0	673	5,181	1906.....	Unknown...	150.00	Good.
30 0	30 0	10 0	900	9,000	1908.....	600.00	600.00	Excellent.
17 0	25 0	12 0	433	3,202	1904.....	Unknown...	35.00	Fair.
16 4	12 2	6 10	199	1,358	1903.....	Unknown...	150.00	Do.
40 0	34 0	10 0	1,137	11,655	1906.....	1,800.00	3,000.00	Good.
18 6	19 0	7 6	352	2,220	1903.....	Unknown...	150.00	Do.
7 0	7 0	5 0	49	270	1903.....	Unknown...	75.00	Do.
7 0	7 0	5 0	49	270	1903.....	Unknown...	75.00	Do.
20 0	10 0	6 6	200	1,300	1903.....	Unknown...	400.00	Fair.
20 0	20 0	7 0	400	2,800	1903.....	Unknown...	500.00	Excellent.
7 0	7 0	5 0	49	270	1903.....	Unknown...	75.00	Good.
26 0	21 0	7 0	546	3,822	1903.....	Unknown...	450.00	Do.
8 0	10 0	6 6	80	580	1903.....	Unknown...	40.00	Tolerable.
4 0	5 6	4 0	22	99	1903.....	Unknown...	30.00	Fair.
32 4	30 5	12 0	1,168	18,603	1903.....	Unknown...	7,000.00	Good.
24 0	16 6	11 0	344	4,978	1903.....	Unknown...	1,000.00	Do.
12 0	12 0	10 0	144	800	1903.....	Unknown...	700.00	Do.
5 0	5 0	7 0	25	175	1903.....	Unknown...	50.00	Do.
29 0	29 0	7 6	841	5,664	1905.....	190.00	300.00	Do.
10 0	8 0	7 0	80	840	1905.....	10.00	30.00	Do.
14 0	16 0	9 0	224	2,688	1906.....	200.00	275.00	Do.
12 0	14 0	9 0	168	2,128	1906.....	20.00	50.00	Do.
20 5	28 5	8 0	586	4,688	Unknown...	Unknown...	250.00	Fair.
25 6	23 4	8 0	574	4,592	Unknown...	Unknown...	250.00	Do.
30 5	26 6	8 0	917	7,336	Unknown...	Unknown...	300.00	Do.
10 4	27 10	8 0	301	2,408	Unknown...	Unknown...	200.00	Do.
20 0	37 9	8 0	755	6,040	Unknown...	Unknown...	250.00	Do.
27 0	36 0	8 0	972	7,776	Unknown...	Unknown...	300.00	Do.
							35,785.00	

No. 6.—Statement showing character, value, and condition of the buildings
GUAM.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Officers' quarters.</i>					
18	Officers' quarters.....	Wood.....	Posts.....	1	Galvanized iron.
106	Seamen's quarters.....	do.....	do.....	1	do.
105	Beachmaster's quarters.....	do.....	do.....	1	do.
Total.....					
<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
1	Government house.....	Stone and timbers.....	Stone.....	2	Galvanized iron.
2	Office building.....	do.....	do.....	2	do.
5	General storehouse.....	Wood and iron.....	Concrete.....	2	do.
8	Sawmill and shop.....	Redwood.....	Posts.....	2	do.
9	Machine shop.....	Wood.....	do.....	1	do.
10	Plumber shop.....	Concrete.....	Concrete.....	1	do.
13	Band stand.....	Bamboo.....	Posts.....	1	Thatch.
14	Forge shed.....	Wood.....	do.....	1	Galvanized iron.
19	Meteorological station.....	Stone.....	Stone.....	1	do.
20	Boiler house.....	Wood.....	Posts.....	1	do.
21	Coal shed.....	do.....	do.....	1	do.
22	Blacksmith shop.....	do.....	do.....	1	do.
28	Wagon shed.....	do.....	do.....	1	do.
31	Electrical shop.....	do.....	do.....	1	do.
32	Paint shop.....	do.....	do.....	1	do.
33	Scale shed.....	do.....	do.....	1	do.
34	Stables.....	do.....	do.....	1	do.
35	Pipe shed.....	Iron and wood.....	do.....	1	do.
36	Lumber shed.....	Wood.....	do.....	1	do.
100	Boathouse.....	do.....	do.....	1	do.
101	Boat shed.....	do.....	do.....	1	do.
162	General storekeeper, warehouse.....	do.....	Stone.....	1	do.
103	Coal shed.....	do.....	Posts.....	1	do.
104	Office.....	do.....	do.....	1	do.
107	Construction and repair shop.....	do.....	do.....	1	do.
108	Steam engineering repair shop.....	do.....	do.....	1	do.
Total.....					
Grand total.....					

GUANTANAMO.

<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
Temporary buildings:					
1	Civil engineer's office.....	Wood.....	Posts.....	1	Galvanized.....
2	Guardhouse.....	do.....	do.....	1	Tar paper.....
3	Stable and feed.....	do.....	do.....	1	Galvanized.....
4	House at corral.....	do.....	do.....	1	do.....
5	Yard and docks, paint house.....	do.....	Sills.....	1	Tar paper.....
6	Storehouse.....	do.....	do.....	1	Galvanized.....
7	Tool house.....	do.....	do.....	1	do.....
8	Stable.....	do.....	do.....	1	do.....
9	Magazine.....	Brick.....	do.....	1	do.....
10	Do.....	Wood.....	do.....	1	Tar paper.....
11	Do.....	do.....	do.....	1	do.....
12	Office building.....	do.....	Posts.....	1	Galvanized.....
13	Civilian quarters.....	do.....	Concrete.....	1	do.....
14	Storehouse.....	do.....	Piles.....	1	do.....
15	Oil house.....	do.....	Sills.....	1	Tar paper.....
Wireless station:					
16	Operator's house.....	do.....	Stone.....	1	Shingle.....
17	Power house.....	do.....	Concrete.....	1	do.....
18	Oil house.....	Brick.....	do.....	1	do.....
19	Wireless masts and rigging.....	Wood.....	do.....	1	do.....
20	Watchman's house.....	do.....	Sills.....	1	Tar paper.....
21	Platform scales.....	do.....	Brick.....	1	do.....
22	Temporary hospital.....	do.....	Concrete.....	1	Galvanized.....
23	Commandant's quarters.....	do.....	do.....	1	do.....
24	Telephone repair shop.....	do.....	Piles.....	1	do.....
25	Machine shop.....	do.....	Concrete.....	1	do.....
Total.....					

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

GUAM.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
48 0	30 0	13 0	1,340	22,000	Sept., 1901..	\$600.00	\$400.00	Poor.
20 0	28 0	8 0	560	5,600	June, 1903...	520.00	300.00	Do.
50 0	16 5	8 5	825	7,012	Apr., 1909...	2,986.00	2,986.00	Good.
							3,686.00	
150 0	43 0	22 0	6,476	168,400	Unknown...	Unknown...	13,000.00	Good.
97 0	24 0	16 0	2,328	37,248	Unknown...	Unknown...	2,500.00	Do.
80 0	30 0	18 0	4,800	43,200	Oct., 1907...	8,905.00	8,905.00	Do.
70 0	24 0	17 0	1,680	33,600	Aug., 1901...	2,600.00	2,000.00	Fair.
45 0	28 0	9 0	1,260	11,340	Dec., 1900...		400.00	Poor.
46 0	24 0	6 4	1,104	10,800	1900		1,000.00	Good.
20 0	20 0	8 0	277	2,700	Dec., 1902...	30.00		Do.
42 0	26 0	9 0	1,099	13,300	June, 1901...	840.66	840.66	Do.
16 0	12 0	8 0	192	1,920			50.00	Poor.
36 0	20 0	20 0	756	16,632	Sept., 1901..	600.00	600.00	Good.
40 0	20 0	8 0	800	7,200	...do.	400.00	150.00	Poor.
40 0	20 0	9 0	800	7,200	Aug., 1902...	575.00	575.00	Good.
84 0	24 0	9 0	2,016	20,160	Apr., 1907...	783.00	783.00	Do.
35 0	12 0	7 0	420	3,360	1901		100.00	Do.
14 0	12 0	8 0	168	1,344	1905		100.00	Do.
18 25	14 2	9 0	266	2,931	Sept., 1906..	212.00	212.00	Do.
60 0	30 0	7 0	1,800	16,200	1905	1,000.00	1,000.00	Do.
80 0	20 0	8 0	1,600	12,800	1908	400.00	400.00	Do.
80 0	36 0	8 0	2,880	23,040	1908	500.00	500.00	Do.
85 0	17 0	6 3	1,428	8,924	May, 1901..	400.00	150.00	Poor.
39 0	12 0	6 6	468	3,042	...do.		50.00	Do.
78 0	31 5	9 0	2,457	22,113			2,000.00	Good.
50 0	20 0	9 0	1,000	9,000	May, 1901..	400.00	400.00	Do.
20 5	12 0	7 0	348	2,784	1900		150.00	Do.
15 0	30 0	9 0	450	4,050	Aug., 1905..		200.00	Do.
18 0	12 0	9 0	216	1,944	...do.		150.00	Do.
							36,215.66	
							39,901.66	

GUANTANAMO.

36 0	12 0	11 0	1,480	6,400	1904	\$1,073.33	\$1,073.33	Good.
24 4	10 4	11 0	900	4,600	1904	372.45	250.00	Poor.
137 5	20 3	8 5	2,950	8,900	1905	1,440.64	1,000.00	Good.
54 2	20 3	12 0	1,101	13,215	1905	122.20	250.00	Do.
24 0	12 0	8 0	600	2,600	1904	179.80	200.00	Fair.
36 4	12 4	8 0	780	3,600	1904	269.70	100.00	Poor.
70 0	30 5	14 0	2,144	29,596	1905	790.50	790.50	Good.
18 0	12 0	8 0	216	1,728	1905	(a)	(a)	Poor.
30 0	20 0	7 0	600	4,200	1905	299.62	299.62	Good.
19 0	8 0	7 0	152	1,064	1905	(a)	(a)	Poor.
5 0	5 0	7 0	25	175	1905	(a)	(a)	Do.
96 0	48 0	12 0	4,608	55,296	1906	4,735.00	4,735.00	Good.
61 0	46 0	26 0	3,766	97,916	1906	8,000.00	8,000.00	Do.
40 0	24 0							
97 0	40 0	19 0	6,025	10,200	1907	3,894.61	3,894.61	Do.
40 5	26 5	10 0	1,033	10,330	1907	970.72	970.72	Do.
44 8	22 8	9 5	2,267	9,700	1905		4,985.40	Do.
33 9	22 9	10 0	1,701	7,767	1905		2,628.26	Do.
20 0	15 0	8 5	1,194	2,550	1905	218.48	218.48	Do.
			200 0				9,000.00	Fair.
18 0	12 0	8 0	496	1,944	1905	168.76	150.00	Do.
14 7	8 8				1906	(a)	1,500.00	Good.
41 1	35 3	12 0	1,450	17,400	1906	1,500.00	1,500.00	Do.
34 0	43 0	12 0	2,200	26,500	1907	2,500.00	2,500.00	Do.
11 0	30 0	10 0	230	4,150	1907	266.79	266.79	Do.
130 0	30 0	15 0	3,900	409,500	1908	4,229.88	4,229.88	Do.
							48,542.59	

a No record.

No. 6.—Statement showing character, value, and condition of the buildings

HONOLULU.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Officers' quarters.</i>					
A	Captain of yard.....	Wood.....	Posts.....	1	Shingle.....
B	Apothecary.....	do.....	do.....	1	do.....
C	Wireless quarters and office.....	Wood, portable.....	do.....	1	Tarred felt.....
Total.....					
<i>Storehouses, offices, and miscellaneous structures.</i>					
1	Coal shed.....	Wood.....	Pile.....	1	Iron.....
2	do.....	do.....	do.....	1	do.....
5	Paymaster's office.....	do.....	Posts.....	1	Shingle.....
6	General offices.....	do.....	do.....	2	do.....
7	Yard dispensary.....	do.....	do.....	1	do.....
8	Wireless power house and mast.....	Wood, portable.....	do.....	1	Tarred felt.....
9	Storehouse.....	Wood.....	do.....	1	Iron.....
Total.....					
Grand total.....					

KEY WEST.

<i>Officers' quarters.</i>					
A	Commandant's.....	Wood.....	Brick.....	2	Galvanized shingles.....
B	do.....	do.....	do.....	2	do.....
C	Paymaster.....	do.....	Concrete.....	2	do.....
D	Civil engineer.....	do.....	do.....	2	do.....
E	Surgeon.....	do.....	Brick.....	2	Wood shingles.....
Total.....					
<i>Workshop, storehouses, offices, and miscellaneous structures.</i>					
1	Storehouse.....	Brick.....	Brick.....	2	Slate.....
2	Condensing plant.....	Wood.....	Brick piers.....	1	Galvanized shingles.....
4	Scale house.....	do.....	Brick.....	1	do.....
5	Carpenter shop.....	do.....	Wood.....	1	do.....
7	Machine shop.....	Brick and iron.....	Piles.....	1	Tile.....
8	Steam engineering, yards and docks offices.....	Brick.....	do.....	2	do.....
9	Foundry.....	do.....	Brick.....	1	Slate.....
10	Mess hall.....	Wood.....	Brick piers.....	1	Tin.....
11	Smith shop.....	Brick.....	Concrete.....	1	Slate.....
12	Latrines.....	Wood.....	Wood.....	1	Tin.....
14	Coal shed.....	do.....	Concrete piers.....	1	Wood shingles.....
15	do.....	do.....	do.....	1	do.....
16	do.....	do.....	do.....	1	do.....
17	do.....	do.....	do.....	1	do.....
19	Storeroom.....	do.....	Wood.....	1	do.....
21	Machine shop.....	Brick and steel.....	Piles.....	2	Tile.....
24	N. coal hoist, pier B.....	Steel pier.....	Steel pier.....		
25	S. coal hoist pier B.....	do.....	do.....		
26	Circular cistern.....	Concrete.....	Concrete.....		Wood.....
27	do.....	do.....	do.....		do.....
28	Rectangular cistern.....	do.....	do.....		Galvanized iron.....
29	Coal shed "A".....	Steel.....	Piles.....	1	do.....
30	Coal shed "B".....	do.....	do.....	1	do.....
31	N. coal hoist, pier A.....	do.....	do.....		
32	S. coal hoist, pier A.....	do.....	do.....		
33a	Shop.....	Wood.....	Brick piers.....	1	Tin.....
33b	Shop, lumber storage.....	do.....	do.....	1	do.....
34	Boiler house.....	Brick.....	Concrete.....	1	Slate.....
35	Cistern.....	Concrete.....	do.....		Steel concrete.....
36	do.....	do.....	do.....		do.....
37	Tools and storage.....	Wood.....	Stone.....		Wood shingles.....

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

HONOLULU.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
44 0	54 0	11 0	1,655	24,825	1901.....	\$2,520.00	\$2,300.00	Good.
24 0	32 0	9 6	816	9,792	1902.....	599.60	450.00	Do.
60 0	25 0	8 0	1,783	19,613	1905.....	5,257.36	4,800.00	Do.
							7,550.00	
.....								
173 0	150 0	18 0	25,950	570,900	1899.....	8,000.00	5,000.00	Fair.
173 0	121 0	18 0	20,933	469,626	1899.....	16,000.00	12,000.00	Do.
40 0	18 0	9 0	720	10,080	1899.....	1,700.00	1,200.00	Good.
40 0	40 0	20 0	3,200	40,000	1901.....	3,300.00	2,800.00	Do.
24 0	27 0	9 0	648	7,776	1901.....	454.07	350.00	Fair.
37 0	23 0	9 0	851	10,212	1905.....	2,928.68	2,400.00	Good.
80 3	30 2	12 0	2,420	36,300	Unknown...	Unknown...	750.00	Fair.
							24,500.00	
.....								
							32,050.00	

KEY WEST.

51 0	31 0	23 0	3,446	26,250	1890.....	\$4,000.00	\$2,000.00	Fair.	
51 0	31 0	23 0	3,446	26,250	1890.....	4,000.00	2,000.00	Do.	
51 6	43 0	26 0	3,716	36,600	1906.....	5,000.00	5,000.00	Good.	
51 6	43 0	26 0	3,716	36,600	1906.....	5,000.00	5,000.00	Do.	
68 0	26 0	21 0	2,547	29,604	Unknown...	Unknown...	1,000.00	Fair.	
							15,000.00		
.....									
184 0	80 0	22 0	25,515	264,000	1890.....	75,000.00	15,000.00	Poor.	
52 0	38 0	20 0	2,032	583,000	1898.....	2,400.00	1,000.00	Fair.	
10 0	10 0	10 0	100	1,360	1898.....	40.00	25.00	Good.	
45 0	16 0	12 0	720	6,700	1899.....	350.00	100.00	Fair.	
208 0	60 0	18 0	12,837	207,600	1899.....	33,000.00	28,000.00	Good.	
31 0	22 0	25 0	539	682	1899.....		1,000.00	Do.	
73 0	43 0	19 0	2,810	54,000	1873.....	8,000.00	4,000.00	Fair.	
56 0	16 0	10 0	896	9,000	1898.....	500.00	250.00	Do.	
69 0	50 0	17 0	2,990	60,800	1904.....	8,000.00	7,000.00	Do.	
30 0	12 0	8 0	750	2,700		40.00	10.00	Do.	
152 0	48 0	12 0	8,000	93,000	1898.....				
144 0	48 0	12 0	7,600	89,000	1898.....	13,000.00	8,000.00	Do.	
128 0	48 0	12 0	7,600	89,000	1898.....				
120 0	48 0	12 0	7,600	89,000	1898.....				
14 0	11 0	10 0	154	1,170	1900.....	140.00	25.00	Do.	
162 0	62 0	33 0	18,762	334,872	1902.....	47,000.00	44,000.00	Good.	
228 0		55 0			1900.....	19,625.00	15,000.00	Fair.	
228 0		55 0			1900.....	19,625.00	15,000.00	Do.	
(a)	(a)	8 6	1,964	90,000g		3,000.00	1,000.00	Poor.	
(a)	(a)	8 6	1,964	90,000g		3,000.00	1,000.00	Do.	
							500.00	250.00	Do.
.....									
150 0	100 0	20 0	15,200	295,000	1900.....	80,000.00	65,000.00	Fair.	
250 0	75 0	20 0	18,750	495,000	1900.....	110,000.00	95,000.00	Do.	
318 0		55 0			1900.....	19,625.00			
318 0		55 0			1900.....	19,625.00			
68 6	23 0	18 0	1,876	30,370	1898.....	1,730.00	300.00	Do.	
32 0	23 0	18 0	726	13,700	1898.....	Unknown...	100.00	Poor.	
39 6	23 0	16 4	720	13,500	1903.....	Unknown...	1,000.00	Good.	
89 3	45 3	12 0	40,362	60,000g	1904.....	9,263.60	9,000.00	Do.	
89 3	45 3	12 0	40,362	60,000g	1904.....	9,263.60	9,000.00	Do.	
55 0	25 0	25 0	2,600	28,000	Unknown...		500.00	Poor.	

a Diameter, 46 feet.

No. 6.—Statement showing character, value, and condition of the buildings

KEY WEST—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures—Continued.</i>					
38	Elevated tank.....	Steel.....	Concrete piers.....		Steel.....
39	Storehouse for oil.....	Concrete.....	Concrete.....	1	Tile.....
40	Wireless operators.....	Wood.....	Brick piers.....	2	Tin.....
41	Recreation building.....	do.....	Stone.....	2	Wood shingles.....
42	Sailors' barracks.....	Stone.....	do.....	4	Tin.....
43	Chief electrician's quarters.....	Wood.....	do.....	1	do.....
44	Wireless operating building.....	do.....	Concrete.....	1	Tile.....
45	Pumping plant.....	Concrete.....	do.....	1	do.....
46	Cistern.....	Steel.....	Concrete steel.....		
47	Stand pipe.....	do.....	do.....		
48	Storehouse.....	Concrete steel.....	Piles.....	2	Tile.....
	Cistern.....	do.....	Concrete.....		Corrugated iron.....
	Total.....				
	Grand total.....				

MARE ISLAND.

<i>Officers' quarters.</i>					
A	Commandant.....	Wood.....	Brick.....	3	Shingle.....
B	Captain of the yard.....	do.....	do.....	3	do.....
C	General storekeeper.....	do.....	do.....	3	do.....
D	Assistant engineer officer.....	do.....	do.....	3	do.....
E	Naval constructor.....	do.....	do.....	3	do.....
F	Assistant naval constructor.....	do.....	do.....	1	do.....
G	Superintending constructor.....	do.....	do.....	1	do.....
H	Civil engineer.....	do.....	do.....	3	do.....
I	Apartment house.....	do.....	Stone.....	3	do.....
J	Yard surgeon.....	do.....	Brick.....	3	do.....
K	Paymaster.....	do.....	do.....	3	do.....
L	Inspection officer.....	do.....	do.....	3	do.....
M	Engineer officer.....	do.....	do.....	3	do.....
N	Officer in charge of magazine.....	do.....	do.....	3	do.....
O	Survey officer.....	do.....	do.....	3	do.....
P	Observatory officer.....	do.....	Wood.....	2	do.....
Q	Aid to commandant.....	do.....	do.....	2	do.....
R	First assistant civil engineer.....	do.....	do.....	1	do.....
S	Assistant outside superintendent, hull division.....	do.....	do.....	2	do.....
<i>Civil employees' quarters.</i>					
16	Vacant.....	Wood.....	Wood.....	2	Shingle.....
17	Supplies and accounts, freight clerk.....	do.....	do.....	1	do.....
18	Stable employees.....	do.....	do.....	1	do.....
19	Electrical machinist.....	do.....	do.....	1	do.....
21	Mail messenger.....	do.....	do.....	1	do.....
22	Keeper of the dump.....	do.....	do.....	1	do.....
23	Master flag maker.....	do.....	do.....	1	do.....
24	Commandant's driver.....	do.....	do.....	1	do.....
25	Civil employees.....	do.....	do.....	2	do.....
29	Master electrician.....	do.....	Brick.....	2	do.....
31	(Removed.).....				
131	Electrical machinist.....	do.....	Wood.....	1	do.....
133	Pilot's quarters.....	do.....	do.....	1	do.....
	Total.....				
<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
36	Smithery extension.....	Brick.....	Stone.....	1	Slate.....
37	Clothing stores.....	Wood and iron.....	Concrete.....	1	Shingle.....
	Clothing stores extension.....	do.....	do.....	1	do.....
38	Shed over cupolas.....	Iron.....	do.....	2	Iron.....
40	Smithery extension.....	Brick.....	Stone.....	1	Tin.....
42	Smithery.....	do.....	do.....	1	do.....
44	Drop forge plant.....	do.....	Brick.....	1	Shingle.....

a Diameter, 56 feet; height, 11 feet.

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

KEY WEST—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
				80,000g	1905.....	\$5,042.40	\$5,000.00	Good.
35 10	51 8	17 0	1,500	41,870	1906.....	5,000.00	5,000.00	Do.
45 9	27 3	19 6	2,197	29,186	Unknown...	Unknown...	500.00	Poor.
50 0	30 0	24 0	2,780	44,250	Unknown...	Unknown...	500.00	Do.
44 3	41 0	32 0	6,650	72,656	Unknown...	Unknown...	1,000.00	Do.
41 0	34 6	10 3	1,050	18,569	Unknown...	Unknown...	100.00	Do.
30 0	16 0	13 0	435	7,978	1906.....	1,563.00	1,563.00	Good.
28 0	28 0	21 0	682	1,578	1908.....	4,884.71	4,884.71	Do.
(a)	(a)			202,000g			5,000.00	Do.
25 0	55 0			202,000g			5,000.00	Do.
114 6	56 6	38 6	25,250	267,800	1910.....	55,308.00	55,308.00	New.
(b)	(b)	40 0		1,520,000g	1910.....			
							404,415.71	
							419,415.71	

MARE ISLAND.

77 0	67 0	30 0	5,159	180,565	1900.....	\$15,000.00	\$19,000.00	Excellent.
77 0	47 0	28 0	3,639	120,000	1900.....	10,000.00	12,200.00	Do.
77 0	47 0	28 0	3,639	120,000	1900.....	10,000.00	14,900.00	Do.
77 0	47 0	28 0	3,639	120,000	1900.....	10,000.00	14,900.00	Do.
77 0	47 0	28 0	3,639	120,000	1900.....	10,000.00	12,200.00	Do.
36 0	30 0	10 0	1,060	15,120	1898.....		1,200.00	Good.
36 0	24 0	9 0	864	11,230	1898.....	600.00	1,000.00	Do.
77 0	47 0	28 0	3,639	120,000	1900.....	10,000.00	14,900.00	Excellent.
93 0	42 0	29 0	3,906	144,500	1900.....	15,000.00	23,500.00	Do.
77 0	47 0	28 0	3,639	120,000	1900.....	10,000.00	12,200.00	Do.
77 0	47 0	28 0	3,639	120,000	1900.....	10,000.00	14,900.00	Do.
77 0	47 0	28 0	3,639	120,000	1900.....	10,000.00	12,200.00	Do.
77 0	47 0	28 0	3,639	120,000	1900.....	10,000.00	14,900.00	Do.
77 0	47 0	28 0	3,639	120,000	1900.....	10,000.00	14,900.00	Do.
77 0	47 0	28 0	3,639	120,000	1900.....	10,000.00	12,200.00	Do.
48 0	24 0	12 0	576	15,000	1900.....	10,000.00	1,500.00	Fair.
40 0	25 0	16 0	1,000	19,000			2,500.00	Do.
42 0	32 0	12 0	1,344	20,830	1908.....	1,500.00	2,500.00	Good.
48 0	32 0	12 0	1,536	23,800	1908.....	1,700.00	2,200.00	Do.
							600.00	Poor.
36 0	34 0	20 0	2,448	30,600			1,500.00	Good.
32 0	24 6	10 0	768	10,368	1898.....	800.00	600.00	Fair.
32 0	24 0	8 0	768	8,448			1,400.00	Good.
32 0	24 6	10 0	768	10,368	1898.....	600.00	1,500.00	Do.
32 0	24 6	10 0	768	10,368	1898.....	600.00	100.00	Fair.
20 0	13 0	8 0	260	2,600	1905.....	230.00	1,500.00	Good.
48 0	32 0	10 0	1,536	19,484	1898.....	400.00	1,100.00	Do.
38 0	27 0	10 0	1,026	12,865	1898.....	845.00	2,000.00	Fair.
107 0	77 0	18 0	8,239	189,497		12,475.00	2,000.00	Fair.
30 0	32 0	21 0	960	25,160	1897.....	2,300.00	2,000.00	Good.
							1,000.00	Do.
36 0	24 0	8 0	864	9,717	1898.....	500.00	1,000.00	Do.
36 0	24 0	8 0	864	9,717	1898.....	600.00		
							217,600.00	
							50,400.00	Good.
130 0	55 0	26 0	7,150	243,100	1871.....		2,300.00	Do.
68 0	35 0	14 3	2,380	46,410	1897.....	2,200.00	2,300.00	Do.
68 0	35 0	14 3	2,380	46,410	1904.....	4,000.00	2,300.00	Do.
49 0	26 0	18 0	1,274	22,932	1901.....	1,368.00	1,500.00	Do.
55 0	48 0	26 6	2,640	91,080	1871.....		13,200.00	Do.
300 0	55 0	26 0	16,500	561,000	1871.....	170,000.00	81,700.00	Do.
50 0	30 0	26 0	1,500	43,500	1871.....		9,500.00	Poor.

ø Diameter, 90 feet.

No. 6.—Statement showing character, value, and condition of the buildings

MARE ISLAND—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures—Continued.</i>					
45	Riggers and sailmakers.	Brick	Stone	2	Slate
46	Plumbing, steel, and brass pipe work.	Iron and concrete.		1	Iron
47	Office building.	Brick	Stone	2	Slate
48	Boiler room.	do	do	1	do
49	Freight shed.	Wood	Wood	1	Shingle
	Freight shed extension.	Steel	Steel	1	Steel
50	Dynamo room.	Brick	Brick	2	Tin
51	Offices and plate shop.	do	Stone	2	Slate
51A	Chemical laboratory.	Wood	Wood	1	Shingle
52	Machine shop No. 1.	Brick	Brick	2	do
53	Mold loft and metal storage.	do	Stone	2	Slate
54	Air compressor room.	do	Brick	1	Tin
55	Pattern shop, pattern storage, and dynamo room.	do	Stone	2	Slate
56	Band stand.	Wood	Wood	1	Tin
60	Storehouse.	do	Brick	1	Shingle
61	Water-closet.	Brick	Stone	1	Tin
62	Scrive board, shipfitter's shop.	Iron	Concrete	1	Iron
64	Pump house for dry dock No. 1.	Brick	Stone	1	Tin
65	Storehouse	Brick and iron.	Concrete	3	do
	Flag room				
	Observatory.	Brick	Concrete	1	Shingle
67	Observatory extension.	Wood	Concrete	1	do
	Storehouse.	Brick	Stone	3	Slate
69	Storehouse extension.	Brick and iron	Concrete	3	Tin
	do	do	do	3	do
71	Storehouse.	Brick	Stone	3	do
	Oil house.	do	Brick	1	do
73	Oil house, addition.	do	do	1	do
	do	do	do	1	do
77	Ordnance stores.	do	Stone	2	Slate
77A	Latrine.	Wood	Concrete	1	Tin
79	Ordnance stores.	Brick	Stone	1	do
81	Unassigned.	Wood	Wood	1	Shingle
82	Nursery.	do	do	1	Glass
	Naval prison.	Brick	Stone	2	Iron
	Naval prison, extension.	Brick and iron	Concrete	2	do
84	do	Concrete	do	2	Concrete
	Naval prison, toilets.	Brick and iron	do	2	Iron
85	Foundry.	Brick	Stone	1	Tin
86	Wagon shed.	Wood	Wood	1	Shingle
87	Machine shop No. 1.	Brick	Stone	2	Tin
88	Stables.	do	do	2	do
89	Machine shop No. 1.	do	do	1	Slate
90	Carriage shed.	Wood	Wood	1	Shingle
91	Machine shop No. 1.	Brick	Stone	1	Slate
92	Old stables.	Wood	Wood	1	Shingle
93	Boiler room and coppersmith shop.	Brick	Stone	1	Tin
95	Coppersmith shop.	do	do	1	do
95	Coppersmith shop extension.	Iron	Concrete	1	Iron
96	Shipfitters' shop.	do	do	1	do
97	Store shed.	Wood	Wood	1	Shingle
98	Timber storage shed.	Iron	Concrete	1	Iron
99	Fire engine house.	Brick and iron	do	2	Tin
99A	Fire engine house extension.	Iron	Iron	2	Iron
100	Timber storage.	do	Concrete	1	do
	Electrical shop.	Brick	do	2	Tin
	Electrical shop extension.	Iron	do	2	do
	Boiler house.	do	do	2	do
102	Timber storage.	do	do	1	Iron
103	Office board of labor.	Wood	Brick	1	Tin
104	Chapel.	do	do	1	Shingle
105	Storehouse (electrical supplies) and superintendent machinery division, outside office.	do	Concrete	1	Shingle and iron.
106	Boat shop.	Brick and iron	do	1	Tin
107	Lumber shed.	Wood	Wood	1	Shingle
108	Shipwrights' shop.				
109	Storage, cylinder A.	Iron	Brick	1	Iron
	Storage, cylinder B.	do	do	1	do
	Storage, cylinder C.	do	do	1	do
	Storage, cylinder D.	do	do	1	do
110	Pumphouse No. 2.	Brick	Concrete	1	Steel and copper.

• Diameter, 40 feet.

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

MARE ISLAND—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
200 0	60 0	32 0	12,000	474,000	1864	\$53,000.00	\$9,500.00	Good.
145 0	68 0	27 3	9,295	358,787	1906	25,600.00	50,900.00	Excellent.
130 0	60 0	36 0	7,800	358,800	1870	55,000.00	26,600.00	Poor.
70 0	55 0	28 0	3,850	138,600	1871	.....	10,700.00	Good.
62 0	37 0	13 0	2,294	41,292	1892	2,500.00	900.00	Poor.
60 0	36 0	20 0	2,160	75,080	1904	8,000.00	6,500.00	Excellent.
62 0	48 0	34 0	2,976	116,372	.....	.....	21,000.00	Good.
400 0	65 0	33 0	20,000	1,082,000	1857	150,000.00	216,400.00	Fair.
40 0	40 0	17 0	1,600	36,800	1905	1,500.00	2,700.00	Excellent.
200 0	70 0	31 0	14,000	539,000	1873	106,000.00	10,200.00	Fair.
400 0	65 0	34 0	26,000	1,092,000	1854	150,000.00	216,400.00	Do.
52 0	44 0	14 0	2,288	44,616	1895	3,470.00	8,200.00	Good.
400 0	60 0	35 0	24,000	1,020,000	1854	140,000.00	201,600.00	Fair.
18 0	18 0	10 0	324	3,726	1896	360.00	100.00	Good.
22 0	16 0	9 0	352	4,224	.....	.....	100.00	Poor.
30 0	18 0	16 0	540	9,720	1893	4,000.00	1,500.00	Good.
82 0	92 0	18 0	7,544	211,232	1897	10,000.00	23,500.00	Do.
48 0	43 0	20 0	2,064	97,000	1887	.....	10,300.00	Do.
154 0	54 0	33 0	8,316	340,956	1901	50,000.00	97,300.00	Excellent.
55 0	18 0	18 0	990	20,790	.....	.....	1,500.00	Poor.
18 0	16 0	10 0	288	3,600	1909	900.00	1,000.00	Excellent.
190 0	55 0	31 9	10,450	415,287	1865	75,000.00	85,700.00	Good.
112 0	55 0	31 9	6,160	265,060	1901	40,000.00	63,100.00	Excellent.
98 0	55 0	31 9	5,390	215,160	1902	40,000.00	55,300.00	Do.
400 0	55 0	32 0	22,000	895,507	1858	157,500.00	185,000.00	Fair.
150 0	30 0	19 0	4,500	85,500	1963	8,600.00	23,700.00	Good.
60 0	30 6	19 0	1,800	3,420	1898	12,000.00	6,800.00	Do.
90 0	30 0	19 0	2,700	51,300	1905	7,500.00	10,300.00	Excellent.
200 0	60 0	31 0	12,000	600,000	1870	61,000.00	97,200.00	Good.
19 0	13 6	10 6	257	35,460	.....	750.00	290.00	Fair.
30 0	24 0	8 0	720	8,280	.....	.....	1,300.00	Do.
100 0	46 4	12 0	4,630	83,340	.....	.....	100.00	Do.
35 0	15 0	4 0	525	4,268	.....	.....	100.00	Do.
57 0	36 0	26 0	2,052	60,510	1891	11,500.00	12,100.00	Good.
50 0	36 0	26 0	1,800	52,200	1901	15,000.00	3,000.00	Excellent.
150 0	43 0	23 10	6,450	175,569	1908	50,000.00	50,000.00	Do.
21 0	20 0	26 0	420	12,180	1903	.....	.....	Do.
330 0	72 0	32 0	22,000	902,000	1858	.....	145,500.00	Fair.
200 0	18 0	12 0	3,600	54,000	1896	750.00	500.00	Do.
360 0	70 0	40 0	25,200	1,234,800	1858	672,000.00	200,000.00	Do.
142 0	42 0	24 3	5,964	186,375	1862	33,000.00	27,500.00	Do.
169 0	70 0	30 0	11,830	461,370	1858	.....	85,000.00	Do.
200 0	18 0	11 0	3,600	46,800	1894	300.00	300.00	Poor.
160 0	70 0	33 0	11,200	470,400	1858	.....	75,000.00	Fair.
150 0	40 0	20 0	6,000	180,000	.....	.....	1,700.00	Poor.
108 0	45 0	18 0	4,860	111,780	1858	.....	14,600.00	Good.
108 0	27 0	21 0	2,916	77,816	1897	7,527.00	8,700.00	Do.
50 0	14 0	11 0	700	10,150	1909	.....	3,000.00	Excellent.
230 0	50 0	14 0	11,500	276,000	1897	33,000.00	33,000.00	Good.
50 0	40 0	11 0	2,000	38,000	.....	.....	300.00	Poor.
234 0	61 0	18 0	14,274	371,124	1898	22,000.00	28,100.00	Excellent.
45 0	40 0	22 0	1,800	50,400	1900	7,000.00	10,100.00	Do.
40 0	38 0	29 0	1,520	53,200	1905	4,000.00	6,600.00	Do.
251 0	84 0	14 0	21,084	548,184	1902	20,000.00	28,800.00	Do.
121 0	60 3	38 0	7,200	309,600	1901	35,000.00	84,600.00	Do.
70 0	60 0	38 0	4,200	170,600	1905	25,000.00	45,000.00	Do.
30 0	60 0	38 0	1,800	77,400	1901	10,000.00	10,000.00	Do.
251 0	84 0	14 0	21,084	463,848	1904	20,000.00	28,900.00	Do.
52 0	34 0	16 0	1,768	41,548	1898	2,200.00	3,600.00	Good.
72 0	29 0	12 0	2,088	42,800	1901	5,000.00	5,600.00	Excellent.
205 0	56 0	12 0	10,300	222,700	1899	.....	4,000.00	Good.
300 0	100 0	32 0	30,000	1,050,000	1904	72,000.00	255,000.00	Excellent.
94 0	50 0	14 0	4,700	103,400	1898	545.00	2,100.00	Good.
(a)	(a)	50 0	1,256	62,800	1900	15,700.00	15,700.00	Excellent.
(a)	(a)	50 0	1,256	62,800	1900	15,700.00	15,700.00	Do.
(a)	(a)	50 0	1,256	62,800	1900	12,300.00	3,000.00	Fair.
(a)	(a)	50 0	1,256	62,800	1900	12,300.00	3,000.00	Do.
(b)	(b)	10 0	1,290	19,300	1910	.....	15,000.00	Excellent.

♢ Octagon; sides, 16 feet 4 inches.

No. 6.—Statement showing character, value, and condition of the buildings

MARE ISLAND—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures—Continued.</i>					
111	Machine shop No. 3.....	Concrete.....	Concrete.....	1	Iron.....
112	Plumbers', tinners', and painters' shop.....	do.....	do.....	2	do.....
113	Shelter roof for small boats.....	do.....	do.....	1	do.....
113.A	do.....	Wood.....	Wood.....	1	do.....
114	Sawmill.....	Brick.....	Concrete.....	2	Slate.....
115	Miscellaneous stores, workshop, electrical school.....	Wood and iron.....	do.....	2	Iron.....
116	Machine shop No. 2.....	Iron.....	do.....	1	do.....
	Machine shop No. 2, extension.....	do.....	do.....	1	do.....
118	Tool room.....	Wood and iron.....	do.....	2	do.....
	Joiners' shop.....	Brick and iron.....	do.....	2	Tin.....
119	Block and spar makers' shop.....	Iron.....	do.....	2	Iron.....
	Extension.....	do.....	do.....	2	do.....
120	Water-closet.....	Wood.....	do.....	1	Shingle.....
121	Light and power station.....	do.....	Wood.....	1	Prepared.....
122	Boiler shop.....	Brick.....	Concrete.....	1	Slate.....
123	Gatehouse and ferry slip.....	Wood.....	do.....	2	Tin.....
125	Dispensary.....	do.....	Brick.....	2	Shingle.....
127	Crematory.....	Iron.....	Concrete.....	2	Iron.....
128	Foundry.....	Brick and iron.....	Brick.....	1	Slate.....
129	Rock crusher.....	Wood.....	Wood.....	2	Shingle.....
135	Water-closets.....	do.....	Concrete.....	1	Tin.....
136	do.....	Iron.....	do.....	1	Iron.....
137	Gun shed.....	do.....	do.....	1	do.....
140	Washhouse.....	Wood.....	Wood.....	1	Shingle.....
141	Storehouse (provisions).....	Iron.....	Concrete.....	1	Iron.....
142	Boiler house.....	do.....	do.....	1	do.....
143	Storehouse (provisions).....	do.....	do.....	1	do.....
144	Bath house.....	Wood.....	Wood.....	1	Shingle.....
145	Coal storage.....	Iron.....	Concrete.....	1	Iron.....
146	Drill hall.....	Wood.....	Piling.....	2	Shingle.....
147	Coal storage.....	Iron.....	Concrete.....	1	Elaterite.....
148	Dry kiln.....	Brick.....	Brick.....	1	Tin.....
	Extension.....	do.....	do.....	1	do.....
149	Coal storage.....	Wood.....	Piling.....	1	Elaterite.....
150	Wireless telegraph station.....	do.....	Wood.....	1	Shingle.....
151	Coal storage.....	do.....	Piling.....	1	Elaterite.....
153	Storehouse (iron storage).....	do.....	Concrete.....	1	do.....
154	Water-closets at dry dock.....	do.....	do.....	1	do.....
155	Storehouse (iron storage).....	Wood.....	Concrete.....	1	Elaterite.....
156	Target gallery.....	do.....	Wood.....	1	Shingle.....
157	Oil tanks.....	Steel.....	Concrete.....	1	Elaterite.....
158	Firing point building.....	Wood.....	Wood.....	1	Tin.....
159	Electrical stores.....	do.....	do.....	1	Shingle.....
160	Revolver gallery.....	do.....	Concrete.....	1	Tin.....
161	Coal and coke storage.....	do.....	Wood.....	1	Shingle.....
162	Lime and pitch shed.....	do.....	do.....	1	do.....
163	Storehouse (provisions).....	do.....	do.....	1	Elaterite.....
164	Latrine, building 116.....	do.....	Concrete.....	1	Tin.....
165	Storehouse (electrical supplies).....	Brick and iron.....	do.....	2	Iron.....
166	Ice plant at Independence.....	Wood and iron.....	Wood.....	1	do.....
183	Condemned stores.....	Wood.....	do.....	1	Shingle.....
185	Cement shed.....	do.....	do.....	1	do.....
187	Storage shed.....	Wood and iron.....	do.....	1	Iron.....
189	Storehouse.....	Iron.....	Brick.....	1	Shingle.....
191	Polishing shop and extension to machine shop No. 1.....	do.....	Concrete.....	2	Iron.....
193	Oil tank.....	do.....	do.....	1	do.....
195	Store shed.....	do.....	do.....	1	do.....
197	Cement-testing laboratory.....	Wood.....	Wood.....	1	Shingle.....
199	Store shed.....	do.....	do.....	1	Batten.....
201	Boiler house.....	do.....	do.....	1	Slate and tin.....
202	Mess house at torpedo boat wharf.....	do.....	do.....	1	Shingle.....
204	do.....	do.....	do.....	1	do.....
205	Electrical school.....	Wood and iron.....	Wood and concrete.....	2	Iron.....
206	Storehouse.....	Wood.....	Wood.....	1	Shingle.....
207	Ordnance stores.....	do.....	do.....	1	do.....
	Total.....				
	Grand total.....				

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

MARE ISLAND—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubic contents.	Date.	Cost.	Value.	Condition.	
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>					
161 0	61 0	28 0	9,821	311,637	1902.....	\$28,000.00	\$50,600.00	Excellent.	
131 0	61 0	22 0	7,990	235,830	1900.....	22,000.00	36,000.00	Do.	
280 0	42 0	13 0	11,760	211,680	1899.....	14,300.00	33,500.00	Do.	
280 0	36 0	15 0	1,068	19,656	1908.....	3,000.00	3,000.00	Fair.	
192 0	61 0	29 8	11,712	442,700	1908.....	75,000.00	78,500.00	Excellent.	
61 0	41 6	22 0	2,531	68,337	1901.....	4,500.00	8,100.00	Good.	
120 0	70 0	35 0	8,400	378,000	1901.....	34,000.00	56,900.00	Excellent.	
80 0	70 0	35 0	5,600	252,000	1905.....		29,400.00	Do.	
60 0	40 0	35 0	4,800	216,000	1905.....	50,000.00	13,700.00	Do.	
250 0	90 0	43 0	22,500	1,068,125	1904.....	100,000.00	309,400.00	Do.	
75 0	60 0	32 0	4,500	183,375	1901.....	16,000.00	29,000.00	Do.	
45 0	60 0	32 0	2,700	110,625	1908.....	75,000.00	75,000.00	Do.	
22 0	16 0	10 0	352	4,575			100.00	Poor.	
60 0	30 0	18 0	1,800	39,000			600.00	Do.	
200 0	90 0	45 0	18,000	945,000	1908.....	68,800.00	144,000.00	Excellent.	
86 0	60 0	33 0	5,160	170,280	1901.....	27,500.00	28,000.00	Do.	
51 0	43 0	25 0	2,193	62,500	1904.....	11,000.00	11,000.00	Do.	
26 0	26 0	24 0	676	28,250	1901.....	7,500.00	500.00	Good.	
183 0	98 0	40 0	20,280	943,020	1903.....	60,500.00	124,100.00	Excellent.	
32 0	30 0	18 0	960	22,080	1901.....		490.00	Fair.	
24 0	16 0	10 0	384	4,008	1899.....	1,000.00	190.00	Poor.	
20 0	15 0	9 10	300	3,675	1901.....		200.00	Fair.	
79 0	60 0	20 0	4,740	94,800	1902.....	7,000.00	15,600.00	Good.	
60 0	40 0	13 0	2,400	40,800	1899.....	3,000.00	3,600.00	Do.	
120 0	72 0	20 0	8,640	162,800	1901.....	12,500.00	28,000.00	Excellent.	
36 0	24 0	12 0	864	13,308	1899.....		1,000.00	Poor.	
120 0	72 0	20 0	8,640	162,800	1901.....	12,500.00	28,000.00	Excellent.	
60 0	15 0	10 0	900	11,250	1899.....	1,621.00	500.00	Good.	
120 0	72 0	20 0	8,640	162,800	1901.....	12,500.00	28,000.00	Excellent.	
84 0	40 0	28 0	3,360	110,880	1902.....	9,000.00	9,100.00	Do.	
120 0	72 0	20 0	8,640	162,800	1902.....	10,000.00	28,900.00	Do.	
67 1	14 2	13 6	952	16,898	1902.....		3,000.00	Good.	
20 8	13 1	13 6	314	5,573			900.00	Do.	
116 0	94 0	20 0	10,800	218,000	1902.....	7,000.00	26,200.00	Excellent.	
14 0	14 0	17 0	196	2,722	1903.....		100.00	Poor.	
116 0	90 0	20 0	10,144	208,800	1902.....	7,000.00	25,100.00	Excellent.	
120 0	72 0	20 0	8,640	240,480	1903.....	6,000.00	21,200.00	Do.	
120 0	72 0	20 0	8,640	240,480	1903.....	6,000.00	21,200.00	Do.	
120 0	72 0	20 0	8,640	240,480	1903.....	6,000.00	21,200.00	Do.	
70 0	15 0	15 0	1,050	18,050	1902.....	838.75	1,100.00	Do.	
94 0	50 0	17 0	4,700	112,800	1903.....	14,500.00	10,900.00	Do.	
62 0	46 0	23 0	2,852	86,986	1905.....	5,200.00	4,000.00	Do.	
50 0	25 3	13 6	1,250	21,875	1903.....	890.00	800.00	Fair.	
92 0	42 0	20 0	3,860	85,000	1905.....	12,400.00	6,800.00	Excellent.	
65 0	35 0	15 0	3,275	68,775			1,400.00	Poor.	
48 0	24 0	12 0	1,152	17,280	1905.....		700.00	Good.	
120 0	72 0	20 0	8,640	176,800	1903.....	6,000.00	21,200.00	Excellent.	
82 0	16 0	10 0	1,312	18,368	1906.....		700.00	Do.	
99 0	50 0	25 0	10,600	172,250	1905.....	8,000.00	24,000.00	Do.	
26 0	24 0	12 0	624	9,360	1910.....	1,378.89	1,500.00	Do.	
80 0	26 0	10 0	2,080	27,000	1905.....	1,000.00	1,100.00	Do.	
50 0	37 0	15 0	1,850	38,850	1905.....	600.00	1,200.00	Good.	
25 5	14 2	11 8	350	4,900	1906.....	500.00	600.00	Excellent.	
50 0	25 0	12 0	1,250	19,700	1906.....	550.00	890.00	Do.	
70 0	40 3	24 0	5,636	78,924	1907.....	3,300.00	6,000.00	Do.	
50 0	50 0	30 0	1,964	61,870	1905.....	12,000.00	12,000.00	Good.	
30 0	20 0	9 0	600	7,500	1907.....	850.00	900.00	Excellent.	
30 0	20 0	12 0	1,000	15,500	1906.....	600.00	500.00	Good.	
30 0	20 0	10 0	1,000	13,500	1898.....	250.00	400.00	Do.	
44 0	14 0	9 0	592	7,980			500.00	Fair.	
40 0	12 0	7 0	480	4,080	1905.....		500.00	Good.	
40 0	12 0	7 0	480	4,080	1905.....		500.00	Do.	
61 0	41 6	22 0	5,063	68,337	1908.....	3,000.00	3,000.00	Excellent.	
36 0	16 0	10 0	576	7,490	1905.....		100.00	Poor.	
							4,215,100.00		
							4,432,700.00		

No. 6.—Statement showing character, value, and condition of the buildings

NARRAGANSETT BAY.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
1	Waiting-room building at government landing, Newport, R. I.	Wood.....	Piles.....	1	Shingle.....
2	Storeroom, office of custodian, and quarters of marine guards at government landing, Newport, R. I.	.....do.....	.....do.....	1½	.....do.....
3	Building No. 19, commandant's house.	.....do.....	Stone.....	2½	.....do.....
Total.....					

NEW LONDON.

<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
1	Storehouse and offices.....	Brick.....	Stone.....	2	Slate.....
2	Storehouse and pumping room.....	.....do.....	.....do.....	2	.....do.....
5	Watchhouse.....	Wood.....	.....do.....	1	Shingle.....
6	Stable.....	.....do.....	.....do.....	2	.....do.....
7	Coal shed.....	Steel.....	Piles and concrete.	1	Corrugated steel.
8	North bridge tramway.....	.....do.....	.....do.....	.....	.....
9	South bridge tramway.....	.....do.....	.....do.....	.....	.....
10	Water tank and tower.....	Steel tower, wood tank.	Concrete.....	.....	Shingle.....
11	Coal pockets.....	Wood.....	File.....	1	Canvas.....
12	.....do.....	.....do.....	.....do.....	1	.....do.....
13	.....do.....	.....do.....	.....do.....	1	Tin.....
Total.....					

NEW ORLEANS.

<i>Officers' quarters.</i>					
a	Janitor's quarters.....	Brick.....	Brick.....	2	Slate.....
b	Crews' quarters.....	Wood.....	.....do.....	1	.....do.....
c	.....do.....	.....do.....	.....do.....	1	.....do.....
	Wireless telegraph station.....	.....do.....	.....do.....	1	Shingle.....
B	Officers' quarters (vacant).....	.....do.....	Brick and concrete.	2	.....do.....
C	.....do.....	.....do.....	.....do.....	2	.....do.....
D	Officers' quarters (naval constructor).....	.....do.....	.....do.....	2	.....do.....
E	Officers' quarters (vacant).....	.....do.....	.....do.....	2	.....do.....
	.....do.....	Wood and brick.	Brick.....	2	.....do.....
Total.....					
<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
1	Dispensary.....	Wood.....	Brick.....	1	Shingle.....
2	Power house.....	Brick and steel..	Piles and concrete.	1	Slate.....
4	Ship fitters' shop.....	.....do.....	.....do.....	2	.....do.....
	Cupola addition.....	.....do.....	.....do.....	2	.....do.....
	Plate furnace shed.....	Iron.....	Concrete.....	1	Galvanized iron.
6	Shops.....	Brick and steel..	Piles and concrete.	1	Composition and copper.
7	Crews' quarters.....	Wood.....	Brick.....	1	Shingle.....
8	Administration building.....	Brick.....	Piles and concrete.	2	Slate.....
9	Heating plant.....	Brick and steel..	.....do.....	1	Copper.....
10	Storehouse.....	.....do.....	.....do.....	2	Slate.....
11	Office building.....	.....do.....	.....do.....	2	.....do.....

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

NARRAGANSETT BAY.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>F. in.</i>	<i>F. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
84 0	25 0	12 6	2,100	26,250	May 4, 1905..	\$6,000.00	\$5,700.00	Good.
50 0	24 0	12 6	1,200	15,000	May 12, 1905.	2,000.00	2,325.00	Do.
46 0	30 6	24 8	5,000	47,102	1896.....	8,000.00	11,000.00	Do.
							19,025.00	

NEW LONDON.

100 0	40 0	24 0	7,778	120,000	1872.....	\$9,000.00	\$4,500.00	Fair.
100 0	40 0	24 0	7,178	120,000	1874.....	9,000.00	4,000.00	Do.
50 0	15 6	9 6	775	155,000	.....	800.00	300.00	Do.
76 0	47 6	16 0	6,570	51,600	.....	2,000.00	700.00	Do.
289 6	93 0	11 6	26,577	680,300	1900.....	70,000.00	65,000.00	Good.
317 6	9 0				1900.....	22,500.00	21,500.00	Do.
317 6	9 0				1900.....	22,500.00	21,500.00	Do.
(*)					1900.....	4,473.00	4,300.00	Do.
98 0	12 0	16 0	1,175	2,000	July, 1901...	3,000.00	2,450.00	Do.
122 0	12 0	21 0	1,464	23,500	Jan., 1902...	5,432.10	5,000.00	Do.
88 0	32 0	42 0	2,816		Sept., 1904...	24,321.25	23,000.00	Do.
							152,250.00	

NEW ORLEANS.

67 0	66 0	26 0	4,422	114,972	.....	Unknown...	\$175.00	Poor.
33 0	24 0	14 0	792	11,088	.....	.....	75.00	Fair.
29 0	24 4	12 0	700	8,400	.....	.....	30.00	Poor.
18 2	13 0	12 0	249	2,988	.....	.....	25.00	Do.
17 0	15 0	12 0	255	3,000	.....	\$100.00	100.00	Very good.
25 6	34 0	10 6	867	9,537	.....	Unknown...	75.00	Good.
67 0	49 0	25 9	5,762	117,780	Oct. 25, 1907	8,000.00	8,000.00	Excellent.
67 0	49 0	25 9	5,762	117,780	.....do.....	8,000.00	8,000.00	Do.
67 0	49 0	25 9	5,762	117,780	.....do.....	8,000.00	8,000.00	Do.
60 0	70 0	24 0	4,500	100,800	.....do.....	8,000.00	9,000.00	Do.
							41,480.00	
26 4	26 4	12 6	693	8,662	July 19, 1901	1,065.00	1,065.00	Excellent.
87 6	40 0	31 3	3,500	119,330	Mar. 11, 1904	95,000.00	95,000.00	Good.
276 10	66 10	39 0	18,782	885,120	.....do.....	.....	.....	Do.
13 6	21 0	28 6	283	9,339	.....do.....	.....	.....	Do.
60 0	42 0	20 0	2,520	50,400	Mar. 27, 1908	.....	.....	Do.
283 0	93 0	40 0	29,166	922,544	Feb. 31, 1906	135,000.00	135,000.00	Do.
99 10	80 6							
99 10	80 6	12 6	693	8,662	Aug. 1, 1902	1,275.00	1,275.00	Very good.
26 4	26 4							
90 0	50 0	35 0	4,500	157,500	Apr. 21, 1905	29,860.00	29,860.00	Excellent.
106 0	71 0	46 0	7,526	361,248	Mar. 29, 1907	31,540.00	31,540.00	Very good.
202 0	61 10	41 0	12,479	510,763	Dec. 21, 1906	90,789.00	90,789.00	Excellent.
177 0	66 3	36 2	11,715	483,824	Mar. 23, 1907	72,825.00	72,825.00	Very good

No. 6.—Statement showing character, value, and condition of the buildings

NEW ORLEANS—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures—Continued.</i>					
16	Storehouse.....	Piles and concrete.	Brick and steel.	2	Slate.....
17	Officers' club.....				Wood.....	Brick.....	1	Shingle.....
19	Kitchen for officers' club.....	do.....	do.....	1	Tar paper.....
	Latrines.....	Brick.....	Concrete.....	1	Slate.....
	Pump house.....	Wood.....	Wood.....	1	Tar paper.....
	Dock master's office.....	do.....	Piles.....	1	do.....
	Paint storehouse.....	do.....	do.....	1	do.....
	Total.....				
	Grand total.....				

NEW YORK.

<i>Officers' quarters.</i>					
A	Commandant's house.....	Wood.....	Stone.....	3½	Tin.....
B	Captain of yard.....	Brick.....	do.....	4	do.....
C	Senior assistant engineer.....	do.....	do.....	4	do.....
D	Inspecting officer.....	do.....	do.....	3½	do.....
E	Naval constructor.....	do.....	do.....	4	do.....
F	Civil engineer.....	do.....	do.....	4	do.....
G	Surgeon of yard.....	do.....	do.....	4	do.....
H	Paymaster of yard.....	do.....	do.....	4	do.....
I	Engineer officer.....	do.....	Concrete.....	3	do.....
K	Recorder of labor board.....	do.....	Stone.....	3	do.....
L	General storekeeper.....	do.....	do.....	3	do.....
	Total.....				
<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
1	Commandant's office.....	Brick.....	Stone.....	2	Tin.....
2	Storehouse.....	do.....	Concrete.....	4	do.....
6	Offices.....	Brick-steel.....	Stone.....	3	do.....
7	Offices and storehouse.....	Brick.....	do.....	3	do.....
8	Storehouse.....	do.....	do.....	2	do.....
9	Do.....	do.....	do.....	2	do.....
10	Power house and joiner shop.....	Stone.....	do.....	4	Tin and gravel
10	Lean-to, power plant.....	Concrete.....	Concrete.....		Plastic slate.
11	Smithery and foundry.....	Brick.....	Stone.....	1	Tin and gravel
12	Sheet-metal shop.....	do.....	do.....	1	Tin.....
13	General stores and patterns.....	do.....	do.....	3	Slate.....
13a	Coal bin.....	do.....	do.....		Concrete.....
14	Lunch room and electrical school.....	do.....	do.....	2	Slate.....
15	Timber shed.....	do.....	do.....		Tin and slate..
16	Do.....	do.....	do.....		do.....
20	Machine shop.....	do.....	do.....	1	do.....
20a	Lean-to, building 20.....	do.....	Concrete.....	1	Felt.....
22	Offices and laboratory.....	do.....	do.....	3	Tin.....
22a	Searchlight tower.....	Steel.....	do.....		do.....
23	Offices and storehouse.....	Brick.....	Concrete.....	3	Tin.....
24	do.....	do.....	do.....	3	do.....
25	Paint shop.....	Iron and brick.....	do.....	2	Corrugated iron.
27	Office building.....	Steel.....	do.....	2	Slate and concrete.
28	Included in No. 128.....				
29	Foundry.....	Brick and steel.....	Stone.....	1	Galvanized iron.
30	Pattern shop.....	do.....	Concrete.....	2	Concrete and steel.
31	Clothing factory.....	do.....	do.....	4	Tin.....
32	Stables.....	Brick.....	Stone.....	2	Slate.....
33	Storehouse.....	do.....	Concrete.....	4	Concrete and slate.
34	Chemical laboratory.....	do.....	Stone.....	2	Tin.....
35	do.....	do.....	do.....	2½	do.....
36	Guardhouse, labor board.....	do.....	do.....	3	do.....
37	Yardmaster and canvas store.....	do.....	Concrete.....	2	do.....
40	Scales.....				

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

NEW ORLEANS—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.	
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>					
24 0	25 0	20 0	529	10,580	Mar. 5, 1907	\$77,983.00	\$77,983.00	Excellent.	
246 0	62 0	32 0	15,252	585,205					
41 4	26 4	12 6	1,083	14,063	July 10, 1903	2,240.00	2,240.00	Do.	
20 0	20 0	8 0	400	3,600	Oct., 1902	221.00	221.00	Do.	
40 0	25 0	12 0	1,000	15,000	Apr. 30, 1907	550.00	5,500.00	Do.	
44 0	11 0	11 6	484	6,292		1,500.00	1,500.00	Very good.	
20 0	20 0	7 0	400	3,400	Apr. 17, 1902	150.00	150.00	Do.	
20 0	20 0	7 0	400	3,400	1903.....	100.00	100.00	Do.	
							545,048.00		
							586,528.00		

NEW YORK.

58 6	55 0	34 0	15,469	104,200	Unknown...	Unknown...	\$12,000.00	Fair.	
51 3	40 0	43 6	8,200	86,878	Unknown...	Unknown...	11,400.00	Do.	
51 0	27 0	37 0	4,948	53,157	Unknown...	Unknown...	7,600.00	Do.	
49 0	28 0	38 0	3,850	50,080	Unknown...	Unknown...	7,600.00	Do.	
49 0	22 0	35 0	4,312	40,480	1864.....	Unknown...	6,650.00	Do.	
49 0	22 0	35 0	4,312	40,480	1864.....	Unknown...	6,650.00	Do.	
48 0	33 0	35 0	6,290	51,072	1864.....	Unknown...	6,650.00	Do.	
51 0	27 0	42 0	4,986	52,402	1881.....	\$10,155.00	7,600.00	Do.	
74 0	23 0	33 0	6,550	52,434	1889.....	8,500.00	7,600.00	Do.	
59 0	22 0	32 0	4,927	49,411	1901.....	7,706.00	6,650.00	Good.	
43 0	22 0	32 0	4,927	49,411	1901.....	7,706.00	6,650.00	Do.	
							87,050.00		
64 0	41 6	40 6	7,440	123,200	Unknown...	Unknown...	1,140.00	Fair.	
200 0	194 0	50 0	132,000	201,300	1867.....	306,673.00	242,250.00	Good.	
200 0	43 6	43 6	39,800	742,000	Unknown...	40,975.00	39,000.00	Do.	
200 0	60 0	42 0	34,000	504,000	1901.....	Unknown...	66,500.00	Do.	
200 0	65 0	32 0	25,000	520,000	1898.....	55,000.00	52,300.00	Do.	
200 0	65 0	32 0	25,000	520,000	1898.....	50,000.00	47,500.00	Do.	
300 0	60 0	49 0	63,500	938,100	Unknown...	331,043.00	287,000.00	Do.	
119 0	23 5	26 1/2	4,346	62,544	1895.....	7,077.00	7,000.00	Do.	
300 0	195 3	24 6	42,000	1,422,900	Unknown...	107,099.00	100,000.00	Do.	
300 0	60 0	24 0	17,000	576,000	Unknown...	30,000.00	28,500.00	Do.	
234 0	60 0	44 6	39,500	659,512	1864.....	93,323.00	72,000.00	Do.	
37 5	56 5	11 6			1901.....	1,646.00	1,600.00	Do.	
300 0	60 0	31 0	35,500	761,250	Unknown...	71,847.00	47,500.00	Fair.	
400 0	60 0	26 0	48,000	720,000	Unknown...	Unknown...	19,000.00	Poor.	
400 0	60 0	26 0	48,000	720,000	Unknown...	Unknown...	19,500.00	Do.	
301 6	80 0	26 9	22,600	857,400	1865.....	205,900.00	128,300.00	Fair.	
80 0	14 6	24 0	2,003	27,384	1907.....	3,000.00	3,000.00	Good.	
300 0	60 0	45 0	51,100	927,000	1901.....	97,000.00	92,000.00	Do.	
		63 0			1903.....	3,210.00	3,100.00	Do.	
300 0	60 0	44 0	51,100	901,020	1903.....	100,000.00	95,000.00	Do.	
300 0	60 0	46 1	51,100	927,000	1899.....	73,000.00	64,400.00	Do.	
94 0	36 0	26 0	6,500	108,000	Unknown...	8,900.00	6,000.00	Do.	
100 0	90 0	33 0	12,800	252,800	1899.....	37,000.00	36,000.00	Do.	
350 0	128 0	31 6	Included 39,500	In No. 128. 1,380,575	1865.....	227,598.00	143,000.00	Fair.	
195 0	60 0	31 6	22,400	462,100	1899.....	37,326.00	36,000.00	Good.	
175 0	102 0	40 0	43,200	567,358	1898.....	40,467.00	41,000.00	Do.	
115 0	92 4	30 6	13,200	270,904	1873.....	35,355.00	24,000.00	Fair.	
420 0	88 0	40 0	119,760	112,000	1899.....	151,329.00	143,000.00	Good.	
66 0	36 0	25 6	2,500	35,565	Unknown...	2,500.00	5,000.00	Do.	
50 0	50 0	38 0	4,500	102,500	.....do.....	49,309.00	24,000.00	Fair.
57 9	40 9	30 0	6,400	85,920	1844.....	22,500.00	17,000.00	Do.	
81 0	50 0	18 0	7,600	99,731	1878.....	14,442.00	11,400.00	Do.	

No. 6.—Statement showing character, value, and condition of the buildings

NEW YORK—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures—Continued.</i>					
41	Central power plant.....	Brick and steel.....	Concrete.....	2	Plastic slate...
43	Pitch house.....	Brick.....	Stone.....	2	Slate.....
44	Shipwright shed.....	Steel.....	Concrete.....	1	Corrugated steel.
45	Crematory.....	do.....	do.....	2	do.....
55	Office, dry dock No. 4.....	Wood.....	do.....	1	Tin.....
57	Wash and dry room, commissary department.....	do.....	Brick and live oak.....	1	do.....
59	Sawdust vault.....	Brick.....	Concrete on live oak.....	2	do.....
60	Old pump house.....	do.....	Concrete.....	1	Slate.....
64	Storehouse.....	Wood.....	Earth.....	1	Tin.....
64a	Condemned stores.....	do.....	do.....	1	do.....
65	Boiler house, cob dock.....	do.....	Concrete.....	1	do.....
66	Foundry shed.....	do.....	Earth.....	1	Wood.....
69	Motor generator house.....	Brick and steel.....	Concrete.....	1	Corrugated steel.
74	Master mason's office.....	Brick.....	Stone.....	1	Slate.....
75	Storage and patterns.....	do.....	do.....	2 ^a	Tin.....
78	Office building, U. S. Revenue Service.....	Wood.....	Live oak.....	2	do.....
79	Storehouse.....	Brick.....	Stone.....	1	Slate.....
87	Inflammable-oil house.....	Steel.....	Concrete.....	1	Corrugated steel.
89	Old boiler house.....	Brick.....	Stone.....	1	Slate.....
90	Guard house, cob dock.....	Wood.....	Concrete.....	2	Tin.....
91	Marine barracks.....	Brick.....	Stone.....	3	do.....
92	Commandant, U. S. Marine Corps.....	do.....	do.....	4	do.....
93	Officers' quarters.....	do.....	do.....	4	do.....
94	Gate house.....	do.....	do.....	2	do.....
95	Hospital annex.....	Brick and stone.....	Concrete.....	4	do.....
95a	Hospital.....	Stone.....	Stone.....	4	do.....
96	Director's laboratory.....	Brick.....	Concrete.....	4	do.....
97	Director's residence.....	do.....	do.....	4	do.....
98	Laboratory.....	Stone.....	do.....	3	do.....
99	Boiler house.....	Brick.....	do.....	1	Corrugated steel.
100	Smallpox house.....	do.....	do.....	1	Tin.....
101a	Boiler tube house.....	Wood.....	Earth.....	1	do.....
103	Stable, hospital.....	Brick.....	Stone.....	1	do.....
104	Gate house.....	do.....	do.....	2	do.....
104a	Cement shed.....	Wood.....	do.....	1	do.....
106	Gatehouse.....	Brick.....	do.....	1	do.....
107	Laundry and boiler house.....	do.....	do.....	1	Corrugated steel.
108	Coal shed.....	Wood.....	Concrete.....	1	Steel.....
109	Stable, laboratory.....	do.....	Stone.....	2	Tin.....
110	Box shop.....	do.....	do.....	1	do.....
112	Cart shed.....	do.....	do.....	1	do.....
114	Bending shed.....	Steel.....	Concrete.....	1	Corrugated steel.
115	Plating shop.....	Steel and brick.....	do.....	2	Tin.....
116	Storehouse.....	Steel.....	do.....	1	Corrugated steel.
116	Motor-generator house.....	do.....	do.....	1	do.....
117	Ordnance stores, shipfitter's shop.....	Brick and steel.....	do.....	2	do.....
120	Oil and varnish store.....	do.....	do.....	2	Tin.....
121	Pay office and auction room.....	do.....	do.....	2	do.....
122	Dispensary.....	do.....	do.....	2	do.....
123	Power house.....	do.....	do.....	2	Slate.....
124	Motor generator house and pump well.....	do.....	do.....	1	Concrete and steel.
124	Motor-generating house.....	Steel.....	do.....	1	Corrugated steel.
125	Pump well, dry docks Nos. 2 and 3.....	Brick.....	do.....	1	Concrete and steel.
126	Naval stores storehouse.....	do.....	do.....	4	Slate.....
127	Boat shop.....	Brick and steel.....	do.....	3	Tin.....
128	Machine shop.....	Steel.....	do.....	1	Slate.....
129	Coaling plant.....	Concrete and steel.....	do.....	1	Corrugated steel.
130	Storehouse.....	Brick.....	do.....	2	Slate.....
131	Sawmill.....	do.....	do.....	3	do.....
132	Locomotive house.....	Terra cotta and brick.....	do.....	1	do.....

^a Thirty-six feet diameter.

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

NEW YORK—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
214 8	131 0	35 0	29,500	224,272	1898.....	\$53,371.00	\$54,000.00	Good.
30 0	25 0	23 0	1,300	19,565	Unknown...	1,000.00	570.00	Poor.
140 0	50 0	13 0	6,800	143,817	1895.....	5,634.00	4,750.00	Good.
30 0	30 0	19 0	1,400	21,600	1895.....	5,400.00	5,800.00	Do.
40 0	40 0	16 0	1,500	28,880	1905.....	600.00	570.00	Do.
135 0	31 0	12 6	4,000	62,775	1898.....	1,500.00	475.00	Poor.
16 0	16 0	36 3	500	256	1899.....	1,400.00	1,330.00	Good.
66 0	73 0	15 0	4,300	118,449	1889.....	5,000.00	2,850.00	Poor.
146 0	80 0	22 0	11,300	382,200	1898.....	1,200.00	950.00	Fair.
89 11	79 1	15 6	7,000	110,360	Unknown...	1,200.00	950.00	Do.
83 0	51 6	19 6	4,100	95,141	1889.....	2,000.00	570.00	Very poor.
150 0	20 0	10 0	3,000	30,000	Unknown...	3,471.00	95.00	Do.
60 0	40 0	16 0	2,200	56,400	1897.....	7,500.00	5,700.00	Fair.
65 0	30 0	18 0	1,800	42,000	Unknown...	Unknown...	1,425.00	Do.
201 0	25 0	22 0	14,700	135,700	do.....	17,000.00	1,900.00	Very poor.
46 0	34 0	23 0	3,100	40,844	1901.....	3,000.00	2,850.00	Good.
170 0	58 0	12 6	9,400	174,258	Unknown...	Unknown...	.....	Poor.
60 0	40 0	14 0	2,300	50,400	1895.....	4,375.00	3,500.00	Fair.
47 0	12 0	12 6	500	7,896	1895.....	Unknown...	1,330.00	Poor.
110 0	30 0	26 0	6,000	79,650	1875.....	Unknown...	3,800.00	Fair.
460 0	43 0	41 5	36,600	559,190	1858.....	111,600.00	57,000.00	Do.
484 0	48 0	46 0	8,400	111,744	1858.....	20,000.00	14,250.00	Do.
96 48	48 0	46 0	17,400	226,858	1858.....	Unknown...	19,000.00	Poor.
67 0	36 0	27 0	5,200	75,000	1858.....	10,000.00	7,600.00	Do.
123 0	54 0	48 0	22,344	268,128	Unknown...	Unknown...	190,000.00	Good.
196 0	132 0	44 6	82,488	824,807	1897.....	50,000.00	47,500.00	Do.
42 0	19 0	25 0	3,294	70,440	.....	.....	.....	.....
75 0	46 0	33 0	10,984	97,776	1864.....	13,973.00	9,500.00	Fair.
98 0	48 0	30 0	13,890	141,120	1864.....	Unknown...	3,300.00	Good.
32 0	32 0	12 0	992	12,280	Unknown...	Unknown...	1,370.00	Do.
28 0	23 0	15 6	619	10,500	Unknown...	2,000.00	1,425.00	Fair.
169 0	54 0	10 6	9,126	141,553	1899.....	5,000.00	2,850.00	Do.
110 0	50 0	20 0	5,320	110,000	Unknown...	1,950.00	475.00	Poor.
38 7	25 0	23 6	1,938	22,908	do.....	1,600.00	1,140.00	Fair.
150 3	34 8	25 0	5,230	54,000	do.....	2,500.00	475.00	Poor.
14 7	8 6	8 6	88	830	do.....	Unknown...	240.00	Fair.
88 0	51 0	13 6	2,963	53,334	do.....	Unknown...	2,850.00	Good.
80 0	50 0	14 0	4,000	84,000	1901.....	3,990.00	3,800.00	Do.
30 9	30 9	25 2	1,892	23,789	Unknown...	Unknown...	2,375.00	Fair.
40 2	22 3	13 0	894	11,609	do.....	Unknown...	475.00	Poor.
104 0	45 0	12 0	4,680	70,200	1882.....	800.00	475.00	Do.
200 0	85 0	17 6	16,500	586,500	1895.....	20,000.00	19,000.00	Good.
200 0	85 0	34 0	33,000	756,500	1898.....	39,000.00	37,000.00	Do.
200 0	60 0	21 0	11,700	344,500	1903.....	27,500.00	26,200.00	Do.
25 0	11 5	10 0	290	3,350	.....	.....	.....	Do.
200 0	85 0	35 0	33,700	813,600	1899.....	35,000.00	35,000.00	Do.
300 0	60 0	33 0	35,000	738,000	1899.....	68,300.00	68,300.00	Do.
70 0	50 0	28 0	6,700	122,500	1900.....	19,127.00	18,000.00	Do.
54 4	40 0	29 0	3,600	49,700	1900.....	14,872.00	14,100.00	Do.
100 0	86 0	38 0	16,500	421,400	1900.....	45,640.00	43,400.00	Do.
(a)		20 0	800	20,480	1900.....	40,000.00	40,000.00	Do.
33 5	22 5	10 0	750	10,200	.....	.....	.....	.....
(b)		21 8	2,800	77,976	1903.....	122,320.00	122,320.00	Do.
200 0	80 0	56 0	62,000	1,126,000	1904.....	157,400.00	157,400.00	Do.
300 0	100 0	68 0	87,600	2,430,000	1904.....	185,000.00	185,000.00	Do.
350 0	430 0	57 0	110,300	4,937,900	1899.....	392,194.00	392,000.00	Do.
340 0	70 0	53 0	.....	1,117,240	1903.....	200,000.00	200,000.00	Do.
300 0	60 0	30 0	35,600	712,173	1905.....	90,000.00	90,000.00	Do.
375 0	65 0	45 0	71,100	1,291,000	1904.....	165,600.00	160,000.00	Do.
155 4	61 4	30 0	9,100	366,751	1905.....	30,000.00	30,000.00	Do.

♠ Sixty-four feet diameter.

No. 6.—Statement showing character, value, and condition of the buildings

NEW YORK—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storerooms, offices, and miscellaneous structures—Continued.</i>					
133	Commandant's stable.....	Brick.....	Stone.....	2	Tin.....
131	Motor-generator house.....	Steel.....	Concrete.....	1	Corrugated steel.....
134	Band stand near building No. 1.....	Wood.....	Stone.....	1	Tin.....
135	Band stand near officers' quarters.....	do.....	do.....	1	Shingle.....
138	Watch house, south gate.....	Brick.....	do.....	1	Slate.....
191	Watchman's box.....	Wood.....	Earth.....	1	Tin.....
200	Gate house, Sands street.....	Brick.....	Concrete.....	2	do.....
201	Latrine.....	Terra cotta.....	do.....	1	do.....
202	do.....	do.....	do.....	1	do.....
203	do.....	do.....	do.....	1	do.....
204	do.....	do.....	do.....	1	do.....
205	do.....	Brick.....	do.....	1	do.....
206	do.....	do.....	do.....	1	do.....
207	do.....	Brick and steel.....	do.....	1	Slate on concrete.....
208	do.....	Brick.....	Live oak and concrete.....		Tin.....
209	Coal bin.....	Wood.....	Earth.....		Open.....
210	Oil tank.....	Brick.....	Concrete.....	1	Concrete.....
211	do.....	do.....	do.....		Corrugated steel.....
212	Latrine.....	Terra cotta.....	do.....		Concrete.....
213	Rifle range.....	Brick.....	do.....		Tin.....
214	Timber shed.....	Wood.....	Earth.....		Rubberoid.....
215	Prison.....	Brick, concrete, and stone.....	Concrete.....	6	Tin.....
216	Heating plant.....	Steel.....	do.....		Corrugated steel.....
217	Oil-tank house.....	Brick and steel.....	Concrete and piles.....		Tin.....
219	Disinfecting house.....	Wood.....	Concrete.....		Slag.....
220	Wireless.....	Wood and cement.....	do.....	1	Shingle.....
221	Cement storehouse.....	do.....	do.....		do.....
222	Motor generator house.....	Corrugated steel and asbestos.....	Concrete.....		Corrugated steel.....
223	do.....	do.....	do.....		do.....
224	do.....	do.....	do.....		do.....
225	Forge shed.....	Wood.....	Wood.....	1	Wood.....
	Total.....				
	Grand total.....				

NORFOLK.

<i>Officers' quarters.</i>					
A	Commandant.....	Wood and brick.....	Stone.....	2 B.	Tin and slate.....
B	Captain of yard.....	do.....	do.....	2 B.	Tin.....
C	Engineer officer.....	do.....	do.....	2 B.	Slate.....
D	Assistant to engineer officer.....	do.....	do.....	2 B.	do.....
E	Naval constructor.....	do.....	do.....	2 B.	do.....
F	Assistant civil engineer.....	do.....	do.....	2	Tin.....
G	Surgeon.....	Brick.....	Brick.....	2 B.	do.....
H	Civil engineer.....	do.....	do.....	2 B.	do.....
I	Aid to commandant.....	do.....	do.....	2 B.	Slate.....
K	Inspection officer.....	do.....	do.....	2 B.	do.....
M	Aid to commandant.....	Wood.....	Concrete and brick.....	2	Tin.....
N	Senior assistant naval constructor.....	do.....	do.....	2	do.....
	Total.....				

* Incomplete.

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

NEW YORK—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
56 0	29 0	22 0	2,000	24,978	Unknown...	Unknown...	\$760.00	Fair.
44 3	12 4	11 5	550	7,375	.....	.....	.....	.....
16 0	16 0	15 0	200	4,800	1872.....	Unknown...	140.00	Do.
16 0	16 0	15 0	240	4,600	1872.....	Unknown...	140.00	Do.
14 0	8 0	8 6	100	1,120	1864.....	Unknown...	240.00	Good.
7 0	5 0	8 0	30	315	1853.....	Unknown...	25.00	Fair.
80 0	15 0	18 0	6,000	15,200	1895.....	\$23,720.00	23,720.00	Good.
45 0	24 0	14 0	1,012	15,120	1897.....	18,000.00	17,500.00	Do.
55 0	18 0	11 0	920	14,355	1897.....	18,000.00	17,500.00	Do.
40 0	18 0	14 0	660	10,080	1898.....	18,000.00	17,500.00	Do.
40 0	18 0	14 0	690	10,080	1898.....	18,000.00	17,500.00	Do.
38 0	22 0	14 0	780	12,104	1899.....	18,000.00	17,500.00	Do.
62 0	18 0	11 0	1,040	15,066	1898.....	18,000.00	17,500.00	Do.
60 0	20 0	10 0	1,050	15,066	1899.....	.....	.....	Do.
40 0	22 10	14 4	860	11,873	1898.....	1,000.00	950.00	Do
119 0	31 0	.....	3,540	40,579	1903.....	1,250.00	1,000.00	Do.
30 0	12 0	.....	280	3,420	1902.....	2,500.00	2,400.00	Do.
73 0	15 0	8 0	930	9,933	1900.....	5,500.00	5,000.00	Do.
47 6	19 0	14 6	830	13,023	1907.....	6,225.00	6,225.00	Do.
208 0	32 0	12 0	6,150	79,872	1906.....	18,000.00	18,000.00	Do.
316 0	36 0	16 6	11,376	284,400	1904.....	.....	.....	Do.
87 4	44 4	56 8	21,000	206,700	1906.....	50,000.00	50,000.00	Do.
26 0	20 0½	16 0	500	9,600	1905.....	.....	.....	Do.
32 8	27 0	11 3	830	17,640	1906.....	.....	.....	Do.
35 0	35 0	11 0	110	13,880	1907.....	2,500.00	2,500.00	Do.
35 0	25 0	11 0	820	12,019	1907.....	4,600.00	4,600.00	Do.
26 0	12 0	15 0	3,600	65,646	.....	.....	.....	Do.
26 0	12 0	10 0	312	3,620	1909.....	800.00	800.00	Do.
26 0	32 0	10 0	832	11,420	1909.....	1,800.00	1,800.00	Do.
26 0	12 0	10 0	312	3,710	1909.....	850.00	850.00	Do.
120 0	35 0	15 0	6,700	12,900	1909.....	7,500.00	7,500.00	Do.
.....	.....	.....	.....	.....	.....	.....	4,377,375.00	.....
.....	.....	.....	.....	.....	.....	.....	4,464,425.00	.....

NORFOLK.

44 0	45 0	33 0	4,940	65,340	1824.....	\$20,000.00	\$8,000.00	Fair.
55 0	36 0	33 0	4,940	65,340	1830.....	15,000.00	8,000.00	Do.
55 3	32 3	33 0	5,511	60,620	1830.....	12,000.00	8,000.00	Do.
52 0	50 0	34 0	4,830	54,740	1830.....	10,000.00	7,000.00	Do.
52 0	50 0	34 0	4,830	54,740	1830.....	10,000.00	7,000.00	Do.
70 0	35 0	23 0	4,580	40,480	1850.....	2,650.00	2,000.00	Good.
72 0	26 0	35 5	5,040	59,640	1881.....	4,300.00	5,000.00	Do.
72 0	26 0	35 6	5,040	59,640	1881.....	4,300.00	5,300.00	Do.
32 0	32 0	42 0	3,600	51,660	1891.....	6,700.00	4,500.00	Fair.
32 0	32 0	42 0	3,600	51,660	1891.....	6,700.00	4,500.00	Do.
60 0	27 0	26 0	2,856	37,130	1899.....	5,000.00	5,000.00	Good.
60 0	27 0	26 0	2,856	37,130	1899.....	5,000.00	5,000.00	Do.
.....	.....	.....	.....	.....	.....	.....	69,000.00	.....

No. 6.—Statement showing character, value, and condition of the buildings

NORFOLK—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
1	Main entrance	Brick	Stone	2	Tin
3	Storehouse	Brick and wood	do.	1	Slate
6	Oil house	Brick	do.	1	do.
9	Smith shop	Brick, steel roof	do.	1	Tin
10	General storage	Wood	Brick	1	do.
11	General storehouse	Brick	Stone	2	Slate
12	Latrine	Wood	do.	1	Tin
13	General storehouse	Brick	do.	2	Slate
14	do.	do.	do.	2	do.
15	do.	do.	Concrete	2	Corrugated iron
16	do.	do.	Stone	2	Tin
17	Storehouse and pay office	do.	do.	2	Slate
18	Shlpwrights' shop	do.	do.	2	do.
19	Officers' officers and storehouse	do.	do.	2	Tin
21	Dry dock pump house	do.	do.	1	Slate
22	Foundry	do.	Pile	1	Galvanized iron
23	Boiler shop	do.	do.	1	Slate
24	Yard chemist	do.	Concrete	1	do.
28	Sail loft and boat shed	do.	do.	2	do.
29	Boat shop	do.	do.	2	do.
30	Sawmill	do.	do.	2	do.
31	Timber shed and artificers' school	do.	do.	2	Tin
32	Timber shed, offices of manufacturing department	do.	do.	2	do.
33	Timber shed	do.	do.	2	do.
34	Coke storage	Wood	do.	1	Corrugated iron
36	Engineer machine shop	Brick	Stone	2	Concrete and plastic slate
37	do.	Brick, steel reinforced	Brick	1	Tin
38	Paint shop	Brick	do.	1	do.
39	Storehouse	do.	Stone	2	Slate
41	Bending shed	Wood	Concrete	1	Tin
42	Plumbers' shop	Brick	do.	1	Monitor and slate
43	Storeroom for tools	do.	Brick	1	Tin
46	Latrine	Wood	Concrete	1	do.
50	Storage	do.	Brick	1	do.
51	General storage	Brick	Stone	2	do.
53	Latrine	do.	do.	2	Slate
54	do.	Wood	Concrete	1	Tin
55	Ship fitters' shed	Corrugated iron	do.	1	do.
56	Sheet-metal shop	Steel and brick	Pile	1	Concrete and tin
57	Oil house	Wood	Brick	1	Tin
59	Hull machine shop	Steel and brick	Pile	1	Concrete and 4-ply composition
60	Central power plant	do.	do.	2	do.
61	Coppersmith shop	do.	do.	1	Concrete and tin
62	Ordnance store	do.	do.	3	do.
63	Acids and oils	Corrugated iron	Concrete	1	Corrugated iron
64	Office building	Brick	do.	2	Tin and slate
65	Electrical workshop	Steel and brick	Pile	2	Concrete and 4-ply composition
66	Garbage crematory	do.	Concrete	1	Tin
67	Stables	do.	do.	2	Tin and 4-ply composition
68	Surgeon's office and dispensary	do.	do.	2	Tin
69	Laundry	Wood	do.	1	do.
70	Pitch house	Brick	Concrete	1	Slate
72	Pattern shop	do.	Pile	1	Tin on concrete
73	Chain storage	do.	Pile and concrete	2	Plastic slate
74	General storehouse	do.	do.	2	Concrete
75	Railroad track scales	do.	do.	1	do.
76	Oil storage tanks	Brick	Pile and concrete	1	Galvanized iron

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

NORFOLK—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
60 0	40 0	30 5	2,400	73,000	1852.....		\$2,000.00	Fair.
40 0	25 0	10 0	700	7,000	.....		100.00	Poor.
22 0	22 0	13 8	315	6,700	.....		300.00	Fair.
200 0	125 0	23 7	23,650	556,912	1864.....	\$60,000.00	60,000.00	Do.
250 0	50 0	19 0	12,500	237,500	1892.....	6,000.00	500.00	Poor.
200 0	65 0	30 2	26,000	392,167	1897.....	45,000.00	18,000.00	Fair.
30 0	15 0	13 10	450	6,225	.....		50.00	Poor.
200 0	65 0	26 0	26,000	338,000	1847.....	37,500.00	18,000.00	Fair.
200 0	65 0	29 0	39,000	377,000	1869.....		20,000.00	Do.
250 0	65 0	32 2	32,500	522,710	1895.....	72,365.00	45,000.00	Good.
250 0	65 0	26 3	32,500	426,560	1845.....	45,000.00	20,000.00	Fair.
180 0	65 0	32 5	23,400	379,275	1869.....		15,000.00	Poor.
200 0	50 0	31 4	20,000	313,333	1867.....	3,396.00	8,000.00	Do.
250 0	60 0	30 5	30,000	456,250	1852.....	40,684.00	1,200.00	Do.
70 0	50 0	15 9	3,500	55,125	1889.....		3,000.00	Fair.
200 0	104 0	24 6	20,800	509,600	1859.....	200,000.00	15,000.00	Poor.
294 0	70 0	29 10	20,500	611,580	1856.....	38,000.00	15,000.00	Do.
43 0	40 0	14 1	1,428	20,111	1872.....	3,300.00	1,500.00	Do.
450 0	70 0	30 5	63,000	958,125	1865.....	74,420.00	30,000.00	Do.
400 0	70 0	33 0	56,000	924,000	1866.....	49,600.00	30,000.00	Do.
400 0	65 0	33 10	57,400	941,800	1888.....	75,000.00	50,000.00	Fair.
400 0	65 0	32 0	52,000	832,000	1866.....	49,600.00	10,000.00	Bad.
400 0	65 0	33 8	52,000	875,333	1882.....	37,300.00	40,000.00	Fair.
400 0	65 0	33 8	52,000	875,333	1882.....	37,000.00	40,000.00	Do.
200 0	200 0	28 4	40,425	763,583	1863.....	79,000.00	35,000.00	Fair.
294 0	60 0	30 4	17,640	17,640	1892.....		25,000.00	Good.
174 0	50 0	15 6	8,700	134,850	1882.....	4,150.00	2,000.00	Fair.
180 0	60 0	31 6	21,600	340,200	1873.....	47,000.00	10,000.00	Poor.
120 0	85 0	12 6	10,200	127,500	.....		1,000.00	Do.
250 0	65 0	28 0	16,250	455,000	1875.....	45,720.00	15,000.00	Fair.
56 0	41 0	14 3	2,180	31,065	1874.....	10,000.00	100.00	Poor.
45 0	18 0	12 0	810	9,720	1895.....		400.00	Do.
65 0	20 0	10 0	1,300	13,000	.....	860.00	500.00	Fair.
250 0	60 0	30 5	30,000	456,250	1849.....	46,000.00	10,000.00	Poor.
42 0	21 0	18 3	1,766	16,115	1867.....	5,000.00	1,000.00	Good.
45 0	18 0	12 3	810	4,420	1895.....	5,000.00	800.00	Fair.
250 0	145 0	21 3	36,250	770,312	1900.....		5,000.00	Poor.
254 0	60 0	26 0	15,240	396,240	1900.....	40,000.00	38,000.00	Good.
100 0	30 0	11 0	3,000	33,000	1898.....	2,200.00	1,000.00	Fair.
272 0	176 0	38 0	48,126	.....	1901.....	100,000.00	100,000.00	Good.
180 0	110 0	39 10	19,800	788,700	1900.....	75,000.00	75,000.00	Do.
193 0	83 0	21 3	16,198	344,207	1901.....	50,000.00	50,000.00	Do.
271 0	60 0	43 0	48,780	699,180	1901.....	75,000.00	75,000.00	Do.
40 0	20 0	11 0	800	8,800	1899.....	425.00	200.00	Fair.
87 0	87 0	34 0	8,800	149,600	1901.....	20,000.00	18,000.00	Good.
180 0	65 0	35 0	23,400	409,500	1902.....	45,000.00	45,000.00	Do.
22 0	18 0	14 22	396	3,550	1901.....	5,000.00	3,500.00	Fair.
122 0	65 0	22 5	9,555	101,400	1901.....	7,500.00	7,000.00	Good.
45 0	38 0	21 10	3,448	37,637	1901.....	10,000.00	10,000.00	Do.
60 0	40 0	14 0	2,592	36,288	1901.....	5,000.00	3,500.00	Fair.
42 0	21 0	14 0	908	12,717	1901.....	1,500.00	1,000.00	Good.
300 0	60 0	20 0	18,020	360,400	1904.....	26,063.00	35,000.00	Do.
52 0	150 0	34 0	15,600	265,200	1905.....	23,700.00	23,000.00	Do.
232 0	65 0	42 0	30,160	633,360	1904.....	67,537.00	67,000.00	Do.
					1901.....	1,600.00	1,500.00	Do.
28 0	43 0	10 0	1,204	12,040	1902.....		1,500.00	Do.

No. 6.—Statement showing character, value, and condition of the buildings

NORFOLK—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures—Continued.</i>					
77	Oil storage.....	Galvanized iron.	Brick.....	1	Corrugated iron.
78	Locomotive house.....	Brick.....	Concrete.....	1	Slate.....
79	Steel storage building.....	Galvanized steel and steel.	Pile and concrete.	1	Galvanized steel.
80	Commandant's boathouse.....	Wood.....	.....	1	Tin.....
81	Mess hall and offices.....	Steel and brick.....	Pile.....	2	Tin on concrete.
84	Latrine.....	Brick and wood.....	Concrete.....	1	Tin.....
86	Hospital.....	Wood.....	.....	2	do.....
87	Storehouse.....	do.....	.....	1	do.....
88	General storehouse.....	do.....	.....	2	do.....
89	Latrine.....	do.....	Concrete.....	1	Plastic slate.....
90	Laundry.....	do.....	do.....	1	Tin.....
91	Armory.....	do.....	do.....	1	do.....
92	Latrine.....	do.....	do.....	1	do.....
	Total.....	.....	.....	.....	.....
	Grand total.....	.....	.....	.....	.....
<i>Miscellaneous.</i>					
	Furniture.....	.....	.....	.....	.....
	Live stock.....	.....	.....	.....	.....
	Carts and vehicles.....	.....	.....	.....	.....
	Yard craft.....	.....	.....	.....	.....

OLONGAPO.

<i>Officer's quarters.</i>					
A	Commanding officer.....	Wood.....	Concrete piers.	2	Corrugated iron.
B	Naval constructor.....	do.....	do.....	1	do.....
C	General storekeeper.....	do.....	do.....	1	do.....
D	Civil engineer.....	do.....	do.....	1	do.....
E	Surgeon (temporary).....	do.....	do.....	1	do.....
F	Inspector of ordnance.....	do.....	do.....	1	do.....
B*	Assistant captain of yard.....	do.....	do.....	1	Rubberoid.....
C*	Paymaster.....	do.....	do.....	1	do.....
D*	Assistant surgeon.....	do.....	do.....	1	do.....
L	Civilian quarters.....	do.....	do.....	1	Corrugated iron.
M	do.....	do.....	do.....	1	do.....
N	do.....	do.....	do.....	1	do.....
O	do.....	do.....	do.....	1	do.....
	Total.....	.....	.....	.....	.....
<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
1	Electric shop.....	Wood and corrugated iron.	Brick.....	1	Corrugated iron.
2	Laundry.....	Brick.....	do.....	1	do.....
3	Storehouse, general storekeeper.....	do.....	do.....	1	do.....
4	South gate, telephone exchange.....	do.....	do.....	1	Concrete.....
5	Forge shop.....	do.....	do.....	1	Corrugated iron.
6	Yards and docks, tool rooms, hull division, sawmill.....	Wood, corrugated iron, and brick.	do.....	1	do.....
7	Foundry.....	Brick.....	do.....	1	do.....
8	Storehouse, general storekeeper.....	do.....	do.....	1	do.....
9	West gate, marine guard.....	do.....	do.....	1	Brick.....
10	Laundry and storehouse, general storekeeper.....	do.....	do.....	1	Corrugated iron.
11	Woodworking and shipfitters' shop.....	Concrete blocks and steel.	do.....	1	do.....
12	Machine shop.....	do.....	do.....	1	do.....

* Annex.

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

NORFOLK—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.	
<i>Ft. in.</i> 30 0	<i>Ft. in.</i> 40 0	<i>Ft. in.</i> 12 0	<i>Sq. ft.</i> 1,200	<i>Cu. ft.</i> 14,400	1902.....	\$500.00	\$400.00	Good.	
75 6	16 6	16 0	1,250	20,000	1901.....	1,620.00	1,500.00	Do.	
163 0	60 0	26 0	9,750	253,500	1904.....	26,645.00	25,000.00	Do.	
52 0	35 6	8 0	1,846	14,740	1904.....	600.00	500.00	Do.	
206 0	51 0	37 0	20,900	386,800	1905.....	55,000.00	55,000.00	Do.	
50 0	28 0	12 0	1,400	1,400	1905.....	5,000.00	4,000.00	Fair.	
40 0	27 0	22 0	1,800	19,800	1906.....	2,500.00	2,500.00	Good.	
65 0	35 0	16 0	2,290	35,640	1906.....	3,500.00	3,500.00	Do.	
120 0	30 0	23 0	7,200	82,800	1907.....	3,560.00	3,500.00	Do.	
52 6	30 0	14 0	1,450	24,700	1907.....	5,000.00	5,000.00	Do.	
25 0	25 0	14 0	625	10,600	1907.....	1,000.00	1,000.00	Do.	
81 0	36 0	15 0	2,800	50,000	1908.....	10,000.00	10,000.00	Do.	
42 0	16 0	108 0	630	6,720	1903.....	3,000.00	2,500.00	Do.	
							1,166,650.00		
							1,235,650.00		
							10,000.00		
							4,000.00		
							5,000.00		
							60,000.00		

OLONGAPO.

104 0	68 0	24 6	7,800	124,000	1908.....	\$11,000.00	\$12,000.00	Good.	
68 0	50 0	12 6	3,050	54,000	1908.....	3,920.00	4,000.00	Do.	
68 0	50 0	12 6	3,050	54,000	1908.....	3,920.00	4,000.00	Do.	
68 0	50 0	12 6	3,050	54,000	1908.....	3,920.00	4,000.00	Do.	
63 0	50 0	7 0	3,200	5,000	1905.....	Unknown ..	2,000.00	Fair.	
58 0	50 0	12 0	3,050	54,000	July 1, 1909 ..	6,000.00	6,000.00	Good.	
52 0	46 0	7 0	2,455	35,222	1905.....	2,055.00	1,800.00	Fair.	
52 0	46 0	7 0	2,455	35,222	1905.....	2,055.00	1,800.00	Do.	
52 0	46 0	7 0	2,455	35,222	1905.....	2,055.00	1,800.00	Do.	
48 0	37 0	10 0	2,170	25,000	July 1, 1909 ..	2,500.00	2,500.00	Good.	
78 0	40 0	10 0	3,500	48,700	.....do.....	3,000.00	3,000.00	Do.
48 0	37 0	10 0	2,170	25,000	.....do.....	2,500.00	2,500.00	Do.
78 0	40 0	10 0	3,500	48,700	.....do.....	3,000.00	3,000.00	Do.
							48,400.00		
111 0	80 0	14 0	8,760	188,370	1886.....	Unknown ..	\$3,500.00	Fair.	
81 0	55 0	12 0	4,455	84,645	1887.....	Unknown ..	100.00	Bad.	
162 0	57 0	18 0	9,324	421,850	1887.....	Unknown ..	14,000.00	Good.	
43 0	9 0	7 0	225	1,575	1888.....	Unknown ..	1,500.00	Do.	
118 0	81 0	13 0	6,095	128,000	1889.....	Unknown ..	1,500.00	Poor.	
115 0	53 0	13 0	4,750	86,310	1889.....	Unknown ..	1,000.00	Do.	
123 0	80 0	13 0	9,840	250,000	1890.....	Unknown ..	8,000.00	Fair.	
159 0	37 0	17 0	5,883	123,543	1890.....	Unknown ..	10,000.00	Do.	
40 0	37 0	12 0	800	9,600	1890.....	Unknown ..	200.00	Poor.	
115 0	50 0	18 0	5,750	123,625	1891.....	Unknown ..	10,000.00	Good.	
178 0	72 0	18 0	12,816	281,952	1891.....	Unknown ..	25,000.00	Do.	
178 0	72 0	18 0	12,816	281,952	1891.....	Unknown ..	25,000.00	Do.	

No. 6.—Statement showing character, value, and condition of the buildings

OLONGAPO—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures—Continued.</i>					
13	Administration building.....	Brick, steel, and wood.	Brick and iron.	3	Corrugated iron.
14	Sick quarters.....	Wood.	Brick.	1	Rubberoid.
15	Storage shed, general storekeeper.....	Wood and corrugated iron.	Concrete piers.	1	Corrugated iron.
19	Shipping office, general storekeeper.....	Brick.	Brick.	1	do.
20	Wharf shed.....	Wood.	Piles.	1	do.
22	Rock crusher.....	do.	Concrete.	1	Rubberoid.
23	Foremen's office.....	do.	Posts.	1	Corrugated iron.
33	Storehouse, general storekeeper.....	Wood and corrugated iron.	Concrete.	2	do.
34	Advance base and storehouse, general storekeeper.....	do.	do.	2	do.
35	Stable and tool shed.....	Wood.	do.	1	do.
36	Blacksmith shop.....	Wood and corrugated iron.	do.	1	do.
37	Office building and quarters.....	Wood.	do.	2	do.
38	Central power house.....	Steel.	Piles and concrete.	1	do.
39	Dock shop.....	Wood and corrugated iron.	Concrete.	2	do.
40	Ship fitters' shop.....	Steel.	do.	1	do.
41	Extension dispensary ^b	do.	do.	1	do.
42	Guardhouse.....	Wood.	Concrete.	1	Corrugated iron.
43	Power house.....	Steel and reinforced concrete.	do.	1	do.
44	Coaling plant storage shed.....	do.	Piles and concrete.	1	do.
45	Foremen's quarters.....	Wood.	do.	1	do.
46	do.....	do.	do.	1	do.
47	do.....	do.	do.	1	do.
48	do.....	do.	do.	1	do.
49	Office.....	do.	do.	1	do.
Total.....					
Grand total.....					

PENSACOLA.

<i>Officers' quarters.</i>					
A	Commandant.....	Brick.	Brick.	2½	Tin.
B	Captain of yard.....	do.	do.	2	Slate.
C	Unoccupied.....	do.	do.	1	do.
D	Surgeon.....	do.	do.	2	Metal.
G	Naval constructor.....	do.	do.	2	do.
H	Civil engineer.....	do.	do.	2	do.
I	Paymaster.....	do.	do.	2	do.
K	Engineer officer.....	Wood.	do.	1	Slate.
M	Unassigned.....	do.	do.	1	do.
Total.....					
<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
1	General wood working shop.....	Brick.	Brick.	2	Slate.
2	General foundry, copper, and boiler shop.....	Steel.	Concrete.	1	Metal.
3	Bath house.....	Wood.	Piles.	1	do.
8	Guardhouse and prison.....	Brick.	Concrete.	1	Tile.
9	Storehouse.....	do.	Brick.	2	Metal.
10	Yard magazine.....	do.	do.	1	Tin.
12	Witch house.....	Brick and wood.	do.	1	Slate and metal.
13	Fire-engine house.....	Brick.	do.	1	Slate.
14	Vacant.....	Brick and wood.	do.	2	Slate and tin.
15	do.....	do.	do.	1	Metal.
16	Surgeon's office and armory.....	Brick.	do.	2	do.

^a Under construction.

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

OLONGAPO—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i> 66 0	<i>Ft. in.</i> 27 0	<i>Ft. in.</i> 30 0	<i>Sq. ft.</i> 4,176	<i>Cu. ft.</i> 167,040	1895.....	Unknown..	\$25,000.00	Good.
165 0	32 0	14 0	4,305	74,025	1901.....	Unknown..	3,800.00	Poor.
200 0	27 0	11 0	5,400	86,400	Unknown...	Unknown...	1,000.00	Fair.
15 0	Hep.	10 0	675	7,000	.....do.....	Unknown...	200.00	Do.
250 0	29 0	12 0	7,250	143,250	1905.....	Unknown...	3,500.00	Good.
45 0	34 0	13 0	1,314	17,442	1906.....	\$4,000.00	4,000.00	Do.
30 0	17 0	10 6	510	6,500	1906.....	95.00	250.00	Do.
120 0	50 0	16 0	11,000	126,000	1907.....	3,700.00	4,500.00	Do.
92 0	46 0	16 0	8,000	101,568	1908.....	3,500.00	4,100.00	Do.
75 0	40 0	9 0	3,000	48,000	1908.....	.....	2,000.00	Do.
122 0	50 0	19 0	6,100	170,800	1908.....	.....	8,000.00	Do.
67 0	47 0	23 0	6,300	97,650	1908.....	10,000.00	10,000.00	Do.
102 0	98 0	18 0	9,600	240,000	(a)	23,000.00	23,000.00	Do.
102 0	44 0	20 0	4,200	113,400	1910.....	.....	5,000.00	Do.
180 0	100 0	16 0	18,000	455,000	Authorized	.....	.....	.....
98 0	25 0	10 0	2,450	29,400	1909.....	.....	.....	Good.
72 0	44 0	15 0	2,856	68,000	1908.....	.....	.....	Do.
452 0	152 0	30 0	67,500	2,496,312	1908.....	.....	.....	Do.
30 0	18 0	8 0	540	.....	1908.....	496,000.00	500,000.00	Fair.
30 0	18 0	8 0	540	.....	1908.....	.....	.....	Do.
30 0	18 0	8 0	540	.....	1908.....	.....	.....	Do.
30 0	18 0	8 0	1,280	.....	1908.....	.....	.....	Good.
30 0	18 0	8 0	720	8,000	1908.....	.....	.....	Fair.
							094,150.00	
							742,550.00	

PENSACOLA.

44 0	40 0	40 0	1,760	70,400	1874.....	\$27,931.00	\$20,000.00	Good.
66 0	18 0	27 0	1,188	32,076	1874.....	8,568.00	8,000.00	Do.
49 0	18 0	12 0	882	10,584	.....	.....	800.00	Bad.
49 5	18 0	27 0	891	24,057	1875.....	7,256.00	7,000.00	Good.
49 5	18 0	27 0	891	24,057	1877.....	.....	7,000.00	Do.
49 5	18 0	27 0	891	24,057	1875.....	9,251.00	7,000.00	Do.
49 5	18 0	27 0	891	24,057	1875.....	8,014.00	7,000.00	Do.
49 5	18 0	12 0	891	10,692	.....	.....	3,000.00	Do.
49 5	18 0	12 0	891	10,692	.....	.....	3,000.00	Do.
							62,800.00	
300 6	50 0	38 0	15,030	571,140	1868.....	.....	45,700.00	Good.
271 0	56 0	16 5	15,176	273,168	1909.....	10,410.00	10,410.00	Do.
25 8	18 1	17 0	470	8,265	1908.....	1,217.00	1,217.00	Do.
50 0	32 0	14 0	1,600	22,400	1908.....	8,200.00	8,200.00	Do.
219 2	61 0	32 0	13,359	427,488	1874.....	55,417.00	25,650.00	Bad.
10 0	10 0	16 0	82	1,312	1874.....	1,136.00	500.00	Fair.
40 6	20 0	16 0	815	13,088	1877.....	.....	1,500.00	Good.
40 0	31 5	13 0	1,260	16,380	1867.....	.....	1,250.00	Fair.
55 6	22 7	25 0	692	17,304	1867.....	8,100.00	1,500.00	Do.
56 0	18 0	15 0	1,008	18,144	1867.....	8,100.00	1,850.00	Good.
48 4	48 4	35 0	1,960	68,600	.....	4,091.00	3,500.00	Fair.

* Authorized, but not constructed.

No. 6.—Statement showing character, value, and condition of the buildings

PENSACOLA—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures—Continued.</i>					
18	Temporary Marine barracks	Brick	Brick	2	Metal
19	Carriage house	do	do	1	Slate
21	Lime house	do	do	1	Metal
25	Storehouse	do	do	2	do
26	Foundry	do	do	1	Slate
26a	Coppersmith shop	do	do	1	Tin
27	Timber shed	do	do	1	Metal
28	Stables	do	do	1	Slate
28a	Carriage shed	Wood	do	1	Iron
29	Vacant	Brick	do	2	do
29a	do	do	do	1	Metal
29b	Chimney	do	Granite	1	do
34	Administration building	do	Brick	2	Metal
35	Blacksmith shop	do	do	1	do
36	Cisterns (1 and 2)	do	do	1	Brick
38	Machine shop	do	do	2	Slate
38a	Boller and dynamo room	do	Concrete	1	Metal
40	Storehouse and offices	do	Brick	2	do
43	Crane shed	Wood	do	1	do
44	Ship fitters' shop	Steel	do	1	do
45	Shops, lofts, and offices	Steel and brick	Concrete	3	Copper
46	Temporary boat shed	Wood	do	1	Metal
47	Central power house	Brick	do	1	Copper
47a	Chimney	do	do	1	do
48	Wireless station	Wood	do	1	Wood
49	Sawmill	Wood and steel	do	1	Metal
50	Dry kiln	Brick	do	1	do
51	Locomotive shed	do	do	1	Concrete
52	Paint shop	do	do	2	do
53	Crematory	do	do	1	Steel
	Flagstaff	Wood	do	1	do
	Bell tower	do	Brick	1	Wood
	Band stand	do	do	1	Metal
	Watch boxes	do	Concrete	1	do
	Latrines	do	Piers	1	do
	Saluting battery shed	do	Concrete	1	do
	Signal tower	Steel	do	1	do
	Hose-drying tower	do	do	1	do
	Total				
	Grand total				

PHILADELPHIA.

<i>Officers' quarters.</i>					
A	Captain of the yard	Brick	Pile	3	Slate
B	Senior assistant in machinery division	Frame	Brick and concrete	3	Shingle
C	Surgeon of the yard	do	do	3	do
K	Chief engineer	do	do	3	do
L	Inspection officer	do	do	3	do
M	Commandant	do	do	3	do
N	Naval constructor	do	do	3	do
O	Civil engineer	do	do	3	do
P	General storekeeper, assigned to foreman laborer	do	do	3	do
R	Dwelling (vacant)	do	Brick piers	2	do
S	do	do	do	2	do
T	do	do	do	2	do
	Total				
<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
1	Yards and docks offices and storehouse and varnishing shop	Brick	Pile	2	Slate
2	Vacant	do	do	1	do
3	Machine shop	do	do	1	do
4	General storehouse and offices	Brick and steel	do	2-3	Slate and tin

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

PENSACOLA—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
184 0	60 0	33 0	8,640	283,120	1882.....	\$42,071.00	\$30,000.00	Good.
116 0	32 6	13 0	3,795	18,135	.....	.....	2,000.00	Fair.
87 0	51 0	12 0	4,457	53,244	.....	.....	3,500.00	Do.
300 4	60 0	34 0	18,030	613,020	1874.....	77,637.00	40,000.00	Do.
66 0	50 0	26 0	3,300	85,700	1882.....	5,353.00	2,700.00	Good.
60 0	40 0	15 0	2,400	26,000	.....	.....	300.00	Bad.
225 0	60 0	19 0	13,500	256,500	1872.....	43,651.00	25,000.00	Fair.
116 0	32 6	13 0	3,781	49,160	.....	.....	2,700.00	Do.
30 5	20 0	12 0	610	7,320	.....	.....	100.00	Do.
131 0	76 0	29 0	9,956	288,724	.....	.....	17,500.00	Do.
30 0	10 0	10 0	300	3,000	.....	.....	250.00	Bad.
12 0	12 0	125 0	.....	.....	.....	.....	4,500.00	Fair.
63 2	54 6	36 0	2,451	124,206	1873.....	24,545.00	15,000.00	Do.
60 0	28 0	14 0	1,680	23,520	1868.....	6,661.00	3,500.00	Good.
43 0	26 0	16 4	2,236	7,020	1868.....	2,050.00	5,000.00	Do.
250 0	90 0	33 0	15,000	495,000	1882.....	58,481.00	40,000.00	Do.
70 0	31 5	19 0	2,205	41,985	1901.....	.....	6,000.00	Do.
179 7	60 0	33 0	10,780	355,740	1875.....	51,326.00	30,000.00	Fair.
44 5	14 0	16 0	623	9,968	1899.....	.....	50.00	Bad.
225 0	60 0	15 0	13,500	202,500	1906.....	17,159.00	17,159.00	Fair.
209 8	61 5	46 0	16,592	779,859	1907.....	109,782.00	109,782.00	Do.
200 0	45 0	20 0	9,000	225,000	1905.....	5,069.00	5,069.00	Do.
140 2	111 0	41 0	15,673	540,718	1907.....	97,000.00	97,000.00	Good.
.....	.....	150 0	.....	.....	1903.....	6,288.00	6,288.00	Do.
30 0	30 0	17 0	900	17,550	1905.....	2,015.00	2,015.00	Do.
80 0	45 0	15 5	3,000	55,800	1907.....	2,526.00	1,500.00	Do.
62 8	32 0	10 0	600	6,000	1906.....	5,020.00	5,020.00	Do.
80 2	30 0	20 0	2,400	48,000	1908.....	7,045.00	7,045.00	Excellent.
80 6	56 8	29 4	4,500	130,000	1908.....	23,050.00	23,050.00	Do.
22 0	27 0	19 0	594	12,003	1908.....	6,062.00	6,062.00	Do.
.....	.....	103 0	.....	.....	1903.....	350.00	350.00	Good.
9 0	9 0	35 0	.....	.....	Open.....	1,212.00	250.00	Fair.
18 6	13 6	11 0	.....	.....	Open.....	254.60	254.00	Good.
.....	.....	.....	.....	.....	Open.....	439.00	439.00	Fair.
.....	.....	.....	.....	.....	Open.....	1,600.00	1,600.00	Bad.
14 2	14 2	9 2	196	3,352	1907.....	210.00	210.00	Good.
14 0	14 0	45 0	.....	.....	Open.....	360.00	360.00	Do.
14 5	14 5	53 0	.....	.....	Open.....	380.00	380.00	Do.
.....	.....	.....	.....	.....	.....	.....	613,810.00	.....
.....	.....	.....	.....	.....	.....	.....	676,610.00	.....

PHILADELPHIA.

34 9	38 3	25 0	4,260	48,900	1875.....	\$12,751.07	\$8,500.00	Good.
53 0	28 0	25 0	3,044	39,000	1892.....	5,000.00	4,500.00	Do.
53 0	28 0	25 0	3,044	39,000	1892.....	5,000.00	4,500.00	Do.
51 6	40 0	23 0	3,828	55,030	1900.....	6,250.00	5,000.00	Do.
51 6	40 0	23 0	3,828	55,030	1900.....	6,250.00	5,000.00	Do.
51 6	40 0	23 0	3,828	55,030	1900.....	6,250.00	5,000.00	Do.
51 6	40 0	23 0	3,828	55,030	1900.....	6,250.00	5,500.00	Do.
47 0	24 0	22 0	2,537	39,134	1905.....	8,000.00	7,000.00	Do.
43 0	28 0	20 6	2,835	39,732	1906.....	8,000.00	7,500.00	Do.
36 8	30 0	18 0	1,536	16,232	1899.....	1,513.56	1,200.00	Do.
38 6	17 2	18 0	1,152	14,262	(b)	.....	300.00	Poor.
38 6	17 2	18 0	1,152	14,262	1899.....	1,511.70	600.00	Do.
.....	.....	.....	.....	.....	.....	.....	54,600.00	.....
230 6	65 4	30 6	25,984	826,663	1875.....	159,945.43	65,000.00	Good.
49 6	38 0	18 0	.....	39,840	1875.....	18,471.79	9,000.00	Do.
274 0	85 0	39 0	23,901	837,820	1877.....	123,749.22	50,000.00	Do.
1,000 0	65 0	34 7	137,340	2,695,171	1877-1905.....	399,922.76	325,000.00	Do.

• Each.

• No record.

No. 6.—Statement showing character, value, and condition of the buildings

PHILADELPHIA—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures—Continued.</i>					
6	Offices of the commandant, captain of the yard, paymaster, inspection department, and accounting officer, and telephone room.	Brick.....	Pile, stone, and concrete.	3	Slag.....
7	Joiner shop.....	do.....	Pile.....	2	do.....
8	Storehouse.....	Corrugated steel.	Concrete....	1	Corrugated steel.
9	Boiler house.....	do.....	do.....	1	do.....
10	Sail loft, laborers' shop, and court-martial rooms.	Brick and steel..	Concrete on piles.	2	State.....
11	Boat, block, and cooper shops and offices, hull division.	do.....	do.....	2	do.....
12	Outside ship fitters' and joiner shops.	do.....	do.....	2	do.....
13	Power station.....	Frame.....	do.....	1	Wood.....
14	Angle smithery.....	Brick and steel..	do.....	1	Tile.....
15	Smithery.....	do.....	do.....	1	do.....
17	Foundry.....	do.....	do.....	1	Copper.....
18	Machine, boiler, and coppersmiths' shops.	do.....	do.....	1	do.....
19	Pattern shop and office of assistant engineer.	do.....	do.....	2	Slate.....
21	Pump house, dry dock No. 2.....	do.....	do.....	2	Copper.....
22	Central power station.....	do.....	do.....	1	Slate.....
24	Paint shop.....	Corrugated steel.	Concrete....	1	Corrugated steel.
25	Plumbing, galvanized sheet metal, tin-smith, electrical shops, and central tool-dressing plant.	Brick and steel..	(Concrete on piles.)	2	Tile.....
26	Ordnance machine shop and offices of machinery division.	do.....	do.....	2	Slate.....
27	Chain shed and anchor rack.....	Corrugated steel.	do.....	1	Corrugated steel.
28	Shed for combustibles.....	Brick.....	do.....	1	Slate.....
29	Rigging loft and storage house.....	Brick and steel..	do.....	2	do.....
30	Garbage incinerating plant.....	Brick.....	do.....	1	Corrugated steel.
31	Water-closet.....	Concrete and wood.	Concrete....	1	Shingle.....
32	Dry kiln and lumber-storage shed.....	Brick and steel..	Concrete on piles.	1	Slate.....
33	Pitch house and oakum loft.....	Brick.....	do.....	2	Tin.....
34	Water-closet.....	Concrete.....	Concrete....	1	do.....
35	do.....	do.....	do.....	1	do.....
36	Range house.....	Brick.....	do.....	1	Slate.....
37	Revolver gallery.....	do.....	do.....	1	Slag.....
38	Range shed.....	do.....	do.....	1	do.....
39	do.....	do.....	do.....	1	do.....
40	Pump house (artesian).....	Concrete.....	do.....	1	Tin.....
41	Electro-plating shop.....	Brick.....	do.....	1	Slate.....
42	Boiler house (shear legs).....	Corrugated iron.	do.....	1	Corrugated iron.
43	Water-closet, dry dock No. 2.....	Concrete.....	Piles.....	1	Slate.....
44	Disinfecting plant.....	Brick.....	Concrete....	1	do.....
45	Substation.....	do.....	Pile.....	1	do.....
114	Gate house.....	Frame.....	Brick piers..	2	Tin.....
115	Dispensary.....	do.....	do.....	2	do.....
119	Scale house.....	do.....	do.....	1	do.....
122	Stable, quarters B and C.....	do.....	Wood.....	1	do.....
127	Post-office.....	do.....	Brick piers..	2	do.....
128	Blacksmith shop.....	do.....	do.....	1	do.....
130	Stable.....	do.....	Concrete piers.	2	do.....
132	Fire engine house.....	do.....	do.....	2	do.....
136	Cart shed.....	do.....	do.....	1	do.....
137	Guardhouse.....	do.....	Brick piers..	2	do.....
139	Pump house, dry dock No. 1.....	Brick.....	Pile.....	1	Slate.....
140	Water-closet.....	Frame.....	do.....	1	Tin.....
141	Boat shed, ship laboratory.....	Frame and steel.	Concrete on piles.	1	Corrugated iron.

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

PHILADELPHIA—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i> 84 0	<i>Ft. in.</i> 56 7	<i>Ft. in.</i> 43 6	<i>Sq. ft.</i> 12,320	<i>Cu. ft.</i> 189,540	1901.....	\$52,873.34	\$43,000.00	Good.
400 0	65 0	36 0	50,000	1,124,416	1882.....	72,000.00		
347 0	61 0	15 0	20,820	495,113	1899.....	23,550.03	18,000.00	Do.
40 0	30 0	20 0	1,102	28,200	1901.....		1,000.00	Do.
309 6	62 0	42 7	34,656	970,652	1903.....	113,414.50	105,000.00	Do.
349 6	65 2	39 0	42,054	1,027,700	1903.....	113,311.74	108,000.00	Do.
277 2	72 11	40 0	38,220	981,677	1905.....	99,900.52	95,000.00	Do.
106 8½	104 3		7,240				10,000.00	Fair.
214 4	62 11	24 0	20,580	756,500	1904.....	51,000.00	50,000.00	Good.
80 0	71 3	40 0	16,191	532,300	1903.....	42,974.47	38,000.00	Do.
277 4	62 10½	42 8	18,994	767,570	1905.....	116,561.40	114,500.00	Do.
188 0	117 11½	25 10						
355 5	101 5	40 7	58,908	2,886,349	1908.....	332,057.00	310,000.00	Do.
171 5½	102 5							
129 7½	82 3½							
104 8	66 7	38 8	11,760	317,057	1905.....	61,500.00	60,000.00	Do.
60 0	Diam.	20 0	4,412	166,793	1907.....		18,000.00	Do.
110 0	58 0	32 0	25,550	769,742	1909.....		80,000.00	Do.
65 0	38 0							
118 10	54 6	12 0	3,600	54,900	1899, 1906....	8,422.80	6,000.00	Do.
61 0	60 0							
308 9	62 10	37 8	29,984	1,160,120	1904.....	103,267.40	100,000.00	Do.
122 7	37 10							
272 0	52 3	51 0	34,700	650,000	1904.....	101,756.33	101,000.00	Do.
101 0	51 6	25 0	5,100	158,600	1902.....	11,000.00	9,600.00	Do.
105 11	48 9½	20 0	4,692	128,452	1902.....	15,000.00	13,500.00	Do.
276 9	53 3	39 0	27,832	571,514	1901.....	97,630.87	80,000.00	Do.
32 6	22 0	17 0	650	14,300	1903.....	8,000.00	6,500.00	Do.
18 8	18 8	9 6	299	3,850	1903.....	1,883.47	1,500.00	Do.
63 4	34 7	12 7	1,864	37,244	1904.....	8,893.00	5,000.00	Do.
45 10	22 1	20 0	1,540	21,800	1904.....	5,196.87	4,800.00	Do.
26 0	17 0	9 0	370	4,862	1904.....	1,972.85	1,600.00	Do.
26 0	17 0	9 0	370	4,862	1904.....	1,972.85	1,600.00	Do.
50 0	40 0	13 0	1,894	32,082	1905.....		3,300.00	Do.
94 6	26 6	11 0	2,232	31,300	1905.....		2,800.00	Do.
30 0	12 9	9 0	308	4,016	1905.....		400.00	Do.
30 0	12 9	9 0	308	4,016	1905.....		400.00	Do.
28 0	25 0	14 0	598	11,000	1906.....	2,835.62	2,700.00	Do.
80 8	20 8	12 0	1,461	24,536	1905.....	2,478.66	2,350.00	Do.
18 0	16 0	10 0	255	2,880	1906.....		300.00	Do.
44 9	26 9	11 0	1,075	17,955	1908.....	4,594.96	4,500.00	Do.
52 0½	41 4½	12 0	3,000	34,000	1909.....	10,000.00	10,000.00	Do.
40 3	34 10	13 0	1,218	18,280	1910.....	1,822.28	1,820.00	Do.
26 0	25 0	25 0	840	17,225	1878.....	1,300.00	800.00	Fair.
37 0	33 6	21 0	3,648	31,000	1875.....	4,725.00	2,500.00	Do.
20 0	13 6	16 0	228	4,860	1898.....	1,880.00	1,000.00	Do.
75 5	25 0	12 0	1,776	27,700	(a)	(a)	900.00	Do.
30 0	25 0	16 0	1,392	14,250	1875.....	1,319.00	1,000.00	Do.
24 6	20 0	12 0	450	5,400	1899.....	300.00	200.00	Do.
78 0	31 0	18 0	4,620	68,544	1876.....	3,000.00	1,500.00	Do.
87 6	35 0	22 0	5,848	94,000	1876.....	4,500.00	1,400.00	Poor.
66 0	65 0	15 0	4,096	63,375	1880.....	600.00	200.00	Do.
48 0	25 0	25 0	1,776	17,225	1878.....	1,300.00	1,000.00	Fair.
66 0	51 0	20 0	3,636	100,000			8,000.00	Do.
28 0	27 0	12 0	650	12,712	1897.....	5,580.00	2,500.00	Poor.
95 0	50 0	17 0	16,250	373,250	1899.....	16,772.00	10,000.00	Fair.
30 0	50 0							

a No record.

No. 6.—Statement showing character, value, and condition of the buildings

PHILADELPHIA—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures—Continued.</i>					
142	Fireproof shed for painting and storage of canvas.	Corrugated steel.	Concrete piers.	1	Corrugated iron.
143	Marine stable.	Frame.	do.	2	Tin.
144	Boat storage shed.	do.	Pile.	1	Wood.
145	Outbuildings for quarters K and L.	do.	Wooden sills	2	Shingle.
146	Outbuildings for quarters M and N.	do.	do.	2	do.
147	Scale house.	do.	do.	1	Tin.
148	Lumber storage shed.	Corrugated iron.	do.	1	Corrugated iron.
148a	Stable, quarters A.	Frame.	do.	2	Tin.
149	Boiler house at camp.	Corrugated iron.	do.	1	Corrugated iron.
150	Boiler house for U. S. S. Lancaster.	do.	do.	1	do.
151	Cement shed.	Wood and corrugated iron.	do.	1	do.
152	Storehouse.	Frame.	do.	1	Tar paper.
153	Mess hall.	do.	do.	1	do.
154	Guard house.	do.	do.	1	do.
155	Paymaster stores.	do.	do.	1	do.
156	Kitchen.	do.	do.	1	do.
157	Boiler house.	do.	do.	1	Corrugated iron.
158	Surgeon's office.	do.	do.	1	Tar paper.
159	Dispensary.	do.	do.	1	do.
160	Barracks.	do.	do.	2	do.
161	do.	do.	do.	2	do.
162	do.	do.	do.	2	do.
163	Armory and office.	do.	do.	1	do.
164	Pay office.	do.	do.	1	do.
165	Prison.	do.	do.	1	do.
166	Office of board of labor employment.	do.	Brick piers.	1	Tin.
167	House over railroad-track scales.	do.	do.	1	do.
168	Band stand, house A.	do.	Wood.	1	do.
169	Band stand, house M.	do.	do.	1	do.
170	Temporary fire-engine house.	do.	do.	1	do.
171	Temporary water-closet, dry dock No. 2.	do.	Pile.	1	Paper.
172	Shed for molding sand.	do.	Concrete.	1	Slag.
173	Coal shed.	Corrugated iron.	Concrete piers.	1	Corrugated iron.
174	Coke shed.	do.	do.	1	do.
175	Wireless station.	Frame.	do.	1	do.
	Total.				
	Grand total.				

PORTSMOUTH.

<i>Officers' quarters.</i>					
A	Commandant.	Wood.	Stone.	2	Shingle.
B	Captain of the yard.	Brick.	do.	2	Slate.
C	Inspection officer.	do.	do.	2	do.
D	General storekeeper.	do.	do.	2	do.
E	Surgeon.	do.	do.	2	do.
F	Engineer officer.	do.	do.	2	do.
G	Boatswain.	do.	do.	2	do.
H	Gunner.	do.	do.	2	do.
I	Carpenter.	do.	do.	2	do.
J	Chaplain.	do.	do.	2	do.
K	Attendant fire engines.	do.	do.	2	do.
L	Superintendent fire engines.	do.	do.	2	do.
M	Construction officer.	Wood.	do.	2	Shingle.
N	Mail messenger.	do.	do.	1	do.
O	Civil engineer.	Brick.	Concrete.	13	Slate and tin.
P	Assistant naval constructor.	do.	do.	23	do.
	Total.				

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

PHILADELPHIA—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.	
<i>Ft. in.</i> 55 0	<i>Ft. in.</i> 35 0	<i>Ft. in.</i> 17 0	<i>Sq. ft.</i> 1,782	<i>Cu. ft.</i> 41,200	1902.....	\$3,716.23	\$3,000.00	Good.	
40 6	20 3	17 0	1,482	18,860	(a)	(a)	300.00	Poor.	
320 0	36 0	20 0	12,250	573,873	1901.....	5,823.41	4,400.00	Good.	
25 0	21 0	13 0	960	8,150	1903.....	2,243.30	1,000.00	Do.	
25 0	21 0	13 0	960	8,150	1903.....	(a)	1,000.00	Do.	
10 0	9 6	7 6	81	760	(a)	(a)	50.00	Fair.	
208 6	45 0	16 8	9,130	210,324	1902.....	6,168.91	3,000.00	Poor.	
40 6	21 4	14 3	1,600	14,400	1875.....	.....	350.00	Good.
21 0	21 0	11 0	360	5,950	1902.....	461.40	450.00	Do.	
38 0	31 0	15 0	1,110	17,670	1903.....	1,641.82	1,000.00	Fair.	
180 0	39 0	11 11	6,981	118,295	1904.....	1,888.95	2,500.00	Good.	
70 0	12 0	11 0	759	8,350	1903.....	839.58	500.00	Poor.	
600 0	26 0	13 0	14,975	249,600	1903.....	19,235.09	13,000.00	Good.	
46 5	18 3	11 0	800	11,000	1903.....	.....	200.00	Fair.
40 3	20 3	8 7	775	9,550	1903.....	.....	100.00	Do.
83 0	25 6	9 0	1,908	27,550	1903.....	.....	500.00	Good.
25 2	21 3	9 0	515	5,880	1903.....	.....	75.00	Poor.
23 3	13 3	9 0	284	3,390	1903.....	.....	50.00	Do.
13 3	13 3	9 0	154	1,932	1903.....	.....	50.00	Do.
108 0	26 0	17 0	5,350	58,968	1903.....	.....	.....	.....
108 0	26 0	17 0	5,350	58,968	1903.....	22,273.50	14,000.00	Fair.	
108 0	26 0	17 0	5,350	58,968	1903.....	.....	.....	.....
53 0	13 3	8 0	634	7,740	1903.....	.....	125.00	Poor.
45 3	13 3	8 0	538	6,600	1903.....	.....	100.00	Do.
46 6	18 3	11 0	810	11,050	1903.....	.....	70.00	Do.
44 0	18 0	12 0	731	10,200	(a)	(a)	150.00	Do.	
9 11	5 3	7 6	45	407	1904.....	45.78	40.00	Do.	
(b)	(b)	8 0	222	1,770	1900.....	208.15	125.00	Do.	
(b)	(b)	8 0	222	1,770	1901.....	245.01	200.00	Do.	
28 0	20 0	14 0	513	8,960	(a)	(a)	500.00	Do.	
62 0	22 0	12 0	1,281	20,460	1907.....	1,261.00	1,200.00	Good.	
51 0	21 0	12 0	1,000	9,103	1908.....	772.73	750.00	Do.	
60 0	15 0	7 0	880	10,560	1909.....	785.80	770.00	Do.	
60 0	15 0	7 0	880	10,560	1909.....	635.80	600.00	Do.	
24 6	18 6	11 0	391	4,300	.....	.....	.....	.....
							1,940,325.00		
							1,994,925.00		

PORTSMOUTH.

<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>	<i>Sq. feet.</i>	<i>Cu. feet.</i>					
62.00	50.00	22.00	3,491	35,783	Prior to 1800.	\$3,000.00	\$3,578.00	Poor.	
60.00	45.00	23.00	4,187	43,209	1849.....	8,621.50	11,000.00	Good.	
85.00	30.00	23.00	3,071	34,293	1836.....	8,182.24	8,500.00	Fair.	
85.00	30.00	23.00	3,071	34,293	1836.....	8,182.24	8,500.00	Good.	
85.00	30.00	23.00	3,059	32,290	1836.....	8,182.24	8,000.00	Fair.	
85.00	30.00	23.00	3,059	32,290	1836.....	8,182.24	8,000.00	Do.	
120.00	29.00	23.00	1,662	18,282	1835.....	13,056.74	17,000.00	Fair.	
		23.00	1,444	15,884	1835.....				
		23.00	1,444	15,882	1835.....				
		23.00	1,662	18,282	1835.....				
40.00	40.00	19.00	1,228	10,518	1859.....	5,090.95	2,955.00	Do.	
54.00	34.00	19.00	1,853	16,760	1863.....	3,469.00	3,250.00	Do.	
83.00	23.00	16.00	3,102	29,469	.....	.....	2,955.00	Do.
61.50	34.50	9.00	3,044	22,975	.....	.....	985.00	Poor.
67.00	40.50	19.00	3,909	35,300	1900.....	7,988.83	9,000.00	Good.	
67.00	40.50	19.00	3,900	35,300	1900.....	7,988.83	9,000.00	Do.	
							92,723.00		

a No record.

b Octagonal; diameter 16 feet 4 inches.

No. 6.—Statement showing character, value, and condition of the buildings

PORTSMOUTH—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storerooms, offices, and miscellaneous structures.</i>					
1	Naval stores.....	Brick	Stone	3	Slate
2	Do.....	do	do	3½	do
3	Boat house (ferry).....	Wood	do	1	Shingle
6	Inspector's office.....	do	Posts	1	do
7	Mast house.....	Stone	Stone	2½	Slate
10	Storage.....	Wood	Brick	1	Metal shingles
13	Office building.....	Brick	Stone	2	Copper
14	Pattern and joiner.....	Stone	do	3½	Slate
15	Storage.....	Brick	do	1	Tin
18	do.....	do	do	2	Slate
19	Telephone exchange.....	do	do	2	do
20	do.....	do	do	3½	do
22	Ordnance building.....	do	do	3	do
26	Boatswain's office.....	Wood	Posts	1	Shingle
27	Paint shop.....	Brick	Stone	2	Slate
29	Storage.....	do	do	2	do
31	Magazine.....	Stone	do	1	do
32	do.....	do	do	1	do
33	Shell house (unloaded).....	do	do	1	do
34	Shell house (loaded).....	do	do	1	do
35	Stable.....	Wood	do	1	Shingle
36	do.....	do	do	1	do
37	do.....	do	do	1	do
38	Stable and storage.....	do	do	1	do
39	Wagon storage.....	do	do	1	do
40	Yard stable.....	Brick	do	2	Slate
41	Storage.....	Wood	do	1½	Shingle
42	do.....	Brick	do	1½	Slate
43	Lumber storage.....	Wood and stone	do	1½	do
44	Cooper shop.....	Brick	do	2	do
45	Machine shop.....	do	do	2	do
46	Boiler house.....	do	do	1	do
51	Pitch house.....	do	do	1	do
53	Storage.....	Wood	do	1	do
54	Watch station.....	do	do	1	Shingle
55	Oakum house.....	Brick	do	2	Slate
56	do.....	Wood	do	1	Shingle
59	Boat shop.....	Brick	do	2½	Slate
60	Boat storage.....	do	Concrete	2	do
62	do.....	do	Stone	1	do
63	Cart shed.....	do	do	1	Asbestos
64	Fire-engine house.....	do	do	1	do
65	do.....	do	do	2½	Slate
68	Operators, wireless.....	do	do	2	do
69	Pump house.....	do	do	1	do
70	Ice house.....	Wood	do	1	Shingle
71	Scale house.....	do	do	1	do
72	Electric plant.....	Brick	Concrete	1	Slate
73	Dispensary.....	do	do	2½	do
74	Sawmill.....	do	do	2	do
75	Foundry.....	do	do	2	do
76	Smith shop.....	do	do	2	do
77	Winch house.....	Wood	Stone	1	Shingle
79	Machine shop.....	Brick	Concrete	3	Plastic
80	do.....	do	do	1	Slate
81	Office, hull division.....	do	do	2	Copper
82	Dry kiln.....	do	do	1	Slate
83	Latrine.....	do	do	1	Flint cote
84	Coaling plant.....	Wood	do	1	Iron
85	Latrine.....	Brick	do	1	Slate
86	General storehouse.....	do	do	3	Plastic
89	Chain shed and rigging loft.....	do	do	2	Tin
91	Pump well, dry dock.....	Stone	do	1	Copper
92	Steel plant.....	Brick	do	2	Slate
93	Naval prison.....	Concrete	do	4	do
94	Office, machinery division.....	Brick	do	1	Tin
95	Pattern shop.....	do	do	3	Slate
96	Boiler shop.....	do	do	1	do
97	Yard scales.....	Wood	do	1	do
	Total.....				
	Grand total.....				

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

PORTSMOUTH—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
200.00	50.00	33.00	34,882	296,540	1834	\$16,146.31	\$30,000.00	Fair.
101.00	51.00	30.00	20,874	240,555	1834	12,580.99	36,000.00	Do.
104.00	25.00	9.00	2,600	33,400	1845	1,619.85	350.00	Poor.
13.00	8.00	7.00	104	928	1847	200.00	50.00	Do.
230.00	70.00	23.00	47,847	574,164	1838	49,981.52	90,000.00	Good.
121.70	60.00	28.50	10,321	258,025	1896	11,962.18	10,000.00	Fair.
101.00	51.00	24.00	8,944	122,980	1867	38,252.49	27,580.00	Good.
120.00	50.00	37.00	20,347	224,484	1861	34,425.14	45,000.00	Do.
50.00	30.00	10.00	1,500	18,000	1855	3,000.00	1,480.00	Fair.
286.00	157.00	31.00	53,686	1,398,000	1864	195,246.66	100,000.00	Poor.
60.00	30.00	22.50	3,156	36,468	1854	5,687.58	3,940.00	Fair.
120.00	64.00	39.00	28,928	341,694	1866	60,774.25	14,775.00	Bad.
125.00	148.00	38.00	22,170	327,600	1865	96,019.30	69,000.00	Good.
22.50	14.50	11.00	326	4,894		400.00	95.00	Fair.
60.00	31.00	25.50	3,202	40,040	1864	6,500.00	3,940.00	Good.
149.00	55.00	27.00	23,076	277,688	1863	28,232.65	24,625.00	Do.
103.00	48.00	15.50	4,074	81,480	1860	25,318.11	23,640.00	Do.
50.00	35.50	10.00	1,298	19,500		10,000.00	5,910.00	Do.
30.00	22.00	12.00	500	8,400	1856	1,934.77	985.00	Fair.
45.00	28.00	15.00	1,017	19,323	1858	10,123.00	4,925.00	Good.
30.00	30.00	14.00	900	18,000	1851	2,000.00	290.00	Poor.
56.00	48.00	12.00	2,688	48,384		1,500.00	485.00	Do.
61.00	33.00	12.00	2,013	34,221		1,900.00	485.00	Do.
104.00	35.00	13.00	3,640	91,000		3,500.00	775.00	Do.
81.00	26.00	8.00	2,106	33,696		600.00	50.00	Do.
81.00	74.00	21.00	7,642	103,544	1858	21,082.00	11,820.00	Fair.
70.00	40.00	13.00	2,800	75,600	1886	1,000.00	750.00	Poor.
200.00	65.00	16.00	23,395	344,838	1853	16,250.00	35,000.00	Fair.
200.00	65.00	16.00	23,395	344,838	1853	16,247.97	20,000.00	Good.
100.00	50.00	16.00	9,118	125,372	1858	12,410.00	14,000.00	Do.
248.00	65.00	28.00	20,526	628,680	1863	50,630.47	65,000.00	Do.
56.00	37.00	17.00	2,072	71,800	1894	7,443.32	3,000.00	Do.
28.00	30.00	10.50	560	10,880		3,000.77	1,970.00	Fair.
301.00	131.00	22.00	39,431	1,971,500		80,637.88	100,000.00	Do.
26.00	16.00	10.00	416	5,824		800.00	195.00	Poor.
60.00	30.00	21.00	3,226	46,800	1869	6,375.79	4,925.00	Fair.
25.00	16.00	8.50	379	3,314		500.00	95.00	Poor.
151.00	56.00	27.00	24,545	292,582	1865	30,724.70	30,000.00	Fair.
203.00	78.67	48.00	26,900	618,500	1904	69,999.91	75,000.00	Good.
60.00	54.00	12.50	2,696	48,528		3,000.00	1,475.00	Fair.
193.00	30.00	13.00	5,790	86,850		2,500.00	1,000.00	Do.
77.00	63.00	16.00	3,034	50,962	1870	8,562.26	3,500.00	Do.
50.00	30.00	19.50	4,074	53,543	1875	5,000.00	4,000.00	Do.
36.00	20.00	18.00	612	14,688		2,500.00	1,480.00	Good.
19.00	13.00	11.00	216	3,240			385.00	Fair.
60.00	40.00	21.00	2,204	55,100			2,910.00	Do.
20.00	17.00	9.50	340	6,120			245.00	Good.
257.00	110.00	34.00	24,093	795,671	1908	74,237.25	80,000.00	Do.
40.00	25.00	25.00	2,508	35,112	1900	6,197.94	8,000.00	Do.
140.00	45.00	28.50	11,616	156,816	1902	30,121.22	30,540.00	Do.
205.00	65.00	32.00	14,716	533,634	1904	40,316.29	40,400.00	Do.
498.00	80.67	23.60	30,595	660,934	1902	56,999.89	60,000.00	Do.
25.00	14.00	8.50	506	5,060			195.00	Poor.
275.00	99.00	57.00	56,148	685,423	1904	114,650.22	115,000.00	Fair.
250.00	91.33	24.50	32,833	1,004,436	1906	100,656.12	110,000.00	Good.
120.00	50.00	27.00	11,177	129,162	1905	35,064.85	40,000.00	Do.
74.00	12.00	12.00	720	12,240			985.00	Do.
33.00	22.50	12.33	642	8,756	1902	2,000.00	1,970.00	Do.
205.00	103.00	46.50	20,604	679,713	1906	106,561.99	100,000.00	Fair.
33.00	22.50	12.33	642	8,756	1902	2,000.00	1,970.00	Good.
200.67	80.67	53.50	16,194	840,838	1905	150,756.02	170,000.00	Do.
220.00	50.00	33.00	20,560	402,864	1905	50,071.74	55,000.00	Do.
(a)		20.00	2,375	124,317	1906			Do.
434.00	73.83	41.75	34,671	1,237,137	1905	150,837.57	160,000.00	Do.
350.00	90.00	{ 90.00 55.00 }	84,600	1,334,000	1908	347,730.08	360,000.00	Do.
100.00	50.00	{ 18.67 47.33 }	5,000	93,821	1905	15,000.00	15,000.00	Do.
167.00	80.00	{ 50.33 31.33 33.33 48.00 69.00 }	38,444	781,960	1908	100,518.03	100,000.00	Do.
274.00	180.00	{ 48.00 69.00 }	41,920	1,716,000	1908	150,689.80	150,000.00	Do.
23.00	16.00	10.50	345	5,002	1906	950.00	950.00	Do.
							2,471,150.00	
							2,563,873.00	

* Diameter, 58.67 feet.

No. 6.—Statement showing character, value, and condition of the buildings

PUGET SOUND.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Officers' quarters.</i>					
A	Surgeon.....	Wood.....	Stone.....	2	Shingle.....
B	Naval constructor.....	do.....	do.....	2	do.....
C	Commandant.....	do.....	do.....	2	do.....
D	Captain of yard.....	do.....	do.....	2	do.....
E	Civil engineer.....	do.....	do.....	2	do.....
F	General storekeeper.....	do.....	do.....	2	do.....
G	Steam engineer officer.....	do.....	do.....	2	do.....
H	Boatswain.....	do.....	Concrete.....	2	do.....
I	Carpenter.....	do.....	do.....	2	do.....
J	Gunner.....	do.....	do.....	2	do.....
O	Unassigned.....	do.....	do.....	2	do.....
P	do.....	do.....	do.....	2	do.....
Total.....					
<i>Workshops, storehouses, office, and miscellaneous structures.</i>					
50	Former general office building.....	do.....	Stone.....	2	do.....
50	Annex to former general office building.....	do.....	do.....	2	do.....
51	Electrician's quarters.....	do.....	Wood.....	1	do.....
52	Dry dock pump and boiler house.....	Brick.....	Brick.....	1	Slate.....
54	Reading room for receiving ship.....	Wood.....	Wood.....	1	Shingle.....
55	Bowling alley for receiving ship.....	do.....	do.....	1	do.....
56	Board of labor building.....	do.....	do.....	1	do.....
57	Temporary coal shed.....	do.....	do.....	1	do.....
58	Machine shop, No. 2.....	Brick.....	Concrete.....	2	Slate.....
59	General storehouse and extension.....	do.....	Brick.....	2	do.....
61	Hose-cart house.....	Wood.....	Wood.....	3	Copper.....
64	Storehouse.....	do.....	do.....	1	Shingle.....
65	Electric-light station.....	Brick.....	Concrete.....	1	do.....
66	Machine shop No. 1.....	do.....	do.....	1	Slate.....
67	Hose-cart house.....	do.....	do.....	1	Tin.....
67	Hose-cart house.....	Wood.....	Wood.....	1	Shingle.....
72	Storehouse for receiving ship.....	do.....	do.....	2	do.....
73	Athletic ground headquarters.....	do.....	do.....	2	do.....
75	Bell tower.....	do.....	do.....	1	do.....
76	Scale shed.....	do.....	do.....	1	do.....
77	Fresh-water pumping station.....	Brick.....	Concrete.....	1	Slate.....
78	General office building.....	do.....	do.....	3	Tin.....
79	Coal storing shed.....	Wood.....	Pile.....	2	do.....
80	Ammunition storing.....	Brick.....	Brick.....	1	Slate.....
81	Shell house.....	do.....	do.....	1	do.....
82	Latrine.....	Wood.....	Wood.....	1	Shingle.....
83	Oil house.....	Brick.....	Concrete.....	1	Tin.....
84	Smithery and shipfitters' shop.....	Iron.....	do.....	2	Shingle.....
86	Bremerton gatehouse.....	Wood.....	do.....	1	Tin.....
87	Charleston gatehouse.....	do.....	do.....	1	do.....
88	Pattern shop.....	Brick.....	do.....	1	do.....
89	Sick quarters.....	Wood.....	Brick.....	1	Tin.....
90	Stable and tool shed.....	do.....	Concrete.....	2	Shingle.....
91	Joiner shop and extension.....	Brick.....	do.....	3	Tin.....
92	Latrine.....	do.....	do.....	3	do.....
92	Latrine.....	do.....	do.....	1	do.....
96	Saluting battery.....	Wood.....	Wood.....	1	Shingle.....
97	General storekeeper's office and annex.....	Brick.....	Concrete.....	2	Tin.....
97	General storekeeper's office and annex.....	Wood.....	do.....	2	Shingle.....
98A	Comfort station and lunch room.....	do.....	do.....	1	do.....
99	Paint shop.....	Iron.....	Concrete.....	1	Iron.....
100	Freight shed on pier 5.....	Wood and iron.....	Pile.....	1	do.....
101	Pattern storage.....	Wood.....	Wood.....	1	Shingle.....
102	Plate metal shop.....	Brick.....	Concrete.....	2	Tin.....
104	Boat shop.....	do.....	do.....	3	Slate.....
105	Latrine.....	Wood.....	do.....	1	Shingle.....
105A	do.....	do.....	do.....	1	do.....
		Steel, cement, and plaster.....	do.....	1	do.....

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

PUGET SOUND.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.	
<i>Fl. in.</i>	<i>Fl. in.</i>	<i>Fl. in.</i>	<i>Sq. ft.</i>	<i>Cubic feet.</i>					
54 0	49 0	25 0	4,038	66,000	June 25, 1895.	\$4,000.00	\$6,000.00	Good.	
54 0	49 0	25 0	4,038	66,000	.....do.....	4,000.00	6,000.00	Do.
77 0	65 0	27 0	7,126	118,000	.....do.....	9,000.00	12,000.00	Do.
54 0	49 0	25 0	4,038	66,000	.....do.....	4,000.00	6,000.00	Do.
54 0	49 0	25 0	4,038	66,000	.....do.....	4,000.00	6,000.00	Do.
49 0	45 0	27 0	2,544	54,000	May 1, 1904.	5,000.00	7,500.00	Do.	
49 0	45 0	27 0	2,544	54,000	.....do.....	5,000.00	7,500.00	Do.
33 6	28 6	12 0	1,748	18,600	June 1, 1905.	3,250.00	3,600.00	Do.	
33 6	28 6	12 0	1,748	18,600	.....do.....	3,250.00	3,600.00	Do.
31 0	24 0	19 0	1,380	17,400	June 2, 1902.	3,000.00	3,000.00	Do.	
52 0	25 0	29 0	2,456	44,529	.....do.....	.....	.....	.....
52 0	25 0	29 0	2,456	44,529	.....do.....	.....	.....	.....
							61,200.00		
64 0	44 0	30 0	7,938	90,000	June 25, 1895.	7,963.00	11,000.00	Fair.	
43 0	42 6	30 0	3,528	56,000	Aug. 4, 1904.	5,000.00	5,000.00	Do.	
30 0	30 0	12 0	841	13,000	Oct. 1, 1894.	550.00	550.00	Good.	
172 0	53 0	17 0	8,450	192,000	Sept. 21, 1896.	51,833.00	45,000.00	Do.	
80 6	20 0	10 0	1,940	27,086	Dec. 14, 1895.	300.00	300.00	Do.	
66 0	7 3	9 0	1,089	13,200	July 27, 1902.	200.00	200.00	Do.	
100 0	12 0	9 0	513	9,300	June 30, 1907.	700.00	700.00	Do.	
28 0	20 0	13 0	3,555	72,400	Dec. 14, 1895.	.....	25.00	Poor.
80 0	46 0	12 0	35,875	1,010,000	July 2, 1898.	59,999.57	55,000.00	Good.	
325 0	68 0	34 0	31,258	519,558	July 25, 1898.	70,050.50	68,000.00	Do.	
122 0	61 0	28 0	391	5,200	May 29, 1906.	50.00	50.00	Do.	
105 6	61 0	40 6	20,280	431,000	Sept. 26, 1898.	5,579.04	4,500.00	Fair.	
24 0	18 0	9 0	1,617	48,000	Mar. 6, 1899.	5,548.00	5,000.00	Good.	
170 0	21 0	16 0	23,646	867,000	Sept. 25, 1900.	55,719.00	50,000.00	Do.	
52 0	36 0	17 0	63	1,000	June 9, 1899.	16.00	16.00	Do.	
242 0	93 0	44 0	725	10,400	1893.....	200.00	200.00	Fair.	
50 0	31 0	11 0	638	9,600	1891.....	.....	100.00	Good.
10 0	8 0	11 0	256	5,000	Jan. 31, 1900.	125.00	100.00	Fair.	
30 0	26 0	9 0	285	4,000	Apr. 15, 1900.	247.01	125.00	Poor.	
30 0	23 0	10 0	1,485	33,654	Oct. 19, 1900.	5,200.00	5,000.00	Good.	
16 0	16 0	40 0	35,452	650,000	Dec. 31, 1904.	94,780.00	90,000.00	Do.	
20 0	16 0	10 0	115,320	2,507,280	Aug. 18, 1903.	120,000.00	110,000.00	Do.	
31 0	28 0	16 0	6,900	150,000	Nov. 25, 1903.	20,609.99	20,000.00	Do.	
26 1	27 11	16 0	6,900	150,000	Nov. 11, 1902.	20,609.99	20,000.00	Do.	
208 0	64 6	47 3	445	7,200	.....do.....	1,000.00	800.00	Do.
620 0	93 0	38 0	702	10,100	May 7, 1901.	1,700.00	1,500.00	Do.	
150 0	50 0	15 0	31,620	772,240	June 7, 1901.	56,063.33	50,000.00	Do.	
150 0	50 0	15 0	825	9,350	Nov. 3, 1902.	2,050.00	1,800.00	Do.	
30 0	16 0	13 0	825	9,350	June 30, 1907.	2,050.00	1,800.00	Do.	
41 0	20 0	12 0	7,100	172,500	.....do.....	9,966.00	9,000.00	Do.
132 0	64 0	20 0	4,408	60,000	Jan. 12, 1902.	11,226.38	10,000.00	Do.	
192 0	64 0	33 0	6,705	98,000	May 7, 1903.	7,190.03	6,000.00	Do.	
34 0	26 0	12 0	6,702	907,400	Jan. 21, 1904.	81,680.50	80,000.00	Do.	
34 0	26 0	12 0	320	4,650	Nov. 18, 1903.	1,566.00	1,500.00	Fair.	
150 0	50 0	20 0	406	4,500	Jan. 2, 1907.	292.19	250.00	Good.	
37 5	35 8	20 0	2,966	41,550	Jan. 11, 1902.	4,726.78	4,600.00	Do.	
61 6	50 0	12 0	3,299	63,212	June 30, 1901.	.....	.....	.....
62 6	32 0	12 0	1,829	32,640	May 4, 1908.	1,479.00	800.00	Fair.	
209 6	71 11	47 0	2,607	58,480	Sept. 7, 1901.	3,882.00	3,800.00	Good.	
43 0	71 11	47 0	5,440	111,000	Sept. 6, 1901.	1,858.24	1,800.00	Do.	
22 0	22 0	12 0	19,440	404,000	Aug. 6, 1901.	46,710.04	46,000.00	Good.	
30 0	15 0	10 0	54,720	1,185,888	Nov. 1, 1906	160,878.99	100,000.00	Do.	
30 0	20 0	25 0	812	13,157	Nov. 24, 1903	5,000.00	5,000.00	Do.	
18 0	9 0	7 0	709	9,927	June 25, 1909	2,146.83	2,100.00	Do.	
68 4	50 0	10 0	3,299	63,212		1,479.00	800.00	Fair.	
60 0	32 0	16 0	1,829	32,640		3,882.00	3,800.00	Good.	
80 0	34 0	16 0	2,607	58,480		1,858.24	1,800.00	Do.	
100 0	40 0	16 0	5,440	111,000		46,710.04	46,000.00	Good.	
30 0	20 0	13 0	19,440	404,000		160,878.99	100,000.00	Do.	
80 0	14 0	7 0	54,720	1,185,888		5,000.00	5,000.00	Do.	
165 2	63 2	35 0	709	9,927		2,146.83	2,100.00	Do.	
309 3	66 6	56 6							
47 0	18 8	11 0							
38 0	18 8	11 0							

No. 6.—Statement showing character, value, and condition of the buildings

PUGET SOUND—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, office, and miscellaneous structures—Continued.</i>					
106	Temporary power house	Wood	Wood	1	Shingle
106	Central power station	Brick and steel	Concrete	1	Concrete and gravel.
107	Storehouse for steel	Wood and steel	do	1	Steel
108	Foundry	Brick and steel	do	1	Copper
109	Boiler and erecting shop	do	do	1	Concrete and tin.
111	Coppersmith shop	Wood	Wood	1	Wood
113	Temporary storehouse	do	do	1	Shingle
114	Boiler house for receiving ship	do	Pile	1	do
119	Lumber shed	do	Wood	2	do
121	Coal chutes and trestle on coaling wharf	do	do	do	do
122	Traveling coal hoist, north tower	do	do	do	do
123	Traveling coal hoist, south tower	do	do	do	do
124	Reservoir, east tank	Steel	Concrete	1	Shingle
125	Reservoir, west tank	do	do	1	do
127	Morgue	Wood	Wood	1	do
128	Disinfecting chamber	do	do	1	do
130	Latrine and annex	do	do	1	do
131	Cement shed	do	do	do	Roofing felt
132	Locomotive roundhouse	Wood	Wood	1	Tin
133	Wireless telegraph station	do	do	1	Shingle
134	Boiler house at coaling plant	do	do	1	Tin
135	Oil house at coaling plant	Corrugated steel	do	1	Steel
138	Forbes's residence	Wood	do	1	Shingle
139	Latrine	do	do	1	do
140	Gun shed	Corrugated steel	Concrete	1	Galvanized steel.
141	West trestle annex to coaling shed	Wood	Wood	1	do
142	Office building at coaling plant	do	do	1	Shingle
143	Lavatory, coaling plant	do	do	1	do
145	Hardwood lumber shed	do	Concrete	2	Galvanized steel.
149	Pay booth	do	Wood	1	Galvanized iron.
150	Pest house	do	do	1	Rubberoid
151	Naval hospital, administration building.	Brick	Concrete	3	Slate.
152	Naval hospital, operating and subsistence building.	do	do	2	do
153	Naval hospital, ward building, west	do	do	2	do
155	Latrine, southwest corner boat shop	do	do	2	Concrete, felt, asphalt, and gravel.
156	East trestle annex to coal shed	Wood	Wood	1	do
157	General storehouse	Reinforced concrete.	Concrete	4	Concrete, tar, and gravel.
158	Prisoners' workshop	Wood	Wood	1	Tin
	Total				
	Grand total				

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

PUGET SOUND—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
32 0	30 0	28 6	899	29,160	Aug. 27, 1903	\$971.24	\$500.00	Fair.
195 0	100 0	52 3	19,500	1,018,875				
242 0	58 8	25 0	14,036	466,000	Apr. 11, 1905	30,726.00	30,000.00	Good.
215 4	90 0	38 0	19,194	666,000	Feb. 21, 1905	69,144.99	69,000.00	Do.
292 0	90 0	49 5	24,916	926,436	July 17, 1907	81,601.71	80,000.00	Do.
80 0	40 0	16 0	3,200	64,720	Oct. 31, 1901	1,937.00	300.00	Poor.
100 0	40 0	14 0	5,840	107,000	Feb. 2, 1904	5,005.30	4,500.00	Fair.
100 0	20 0	10 0	955	21,500	Nov. 22, 1903	1,609.69	1,500.00	Good.
50 0	20 6	18 0	7,724	76,520	Mar. 6, 1906	860.27	890.00	Do.
155 6	26 0	14 0			Nov. 25, 1903	8,056.40	8,000.00	Do.
77 9	22 0				do	26,000.00	24,000.00	Do.
77 9	22 0				do	26,000.00	24,000.00	Do.
	30 0	40 0	707	200,000 G	Apr. 24, 1897	3,875.05	3,500.00	Do.
	30 0	40 0	707	200,000 G	do	3,875.05	3,500.00	Do.
12 3	8 3	8 0	81	960	Apr. 26, 1905	100.00	100.00	Do.
20 3	10 3	8 0	178	2,422	Apr. 28, 1905	180.11	180.00	Do.
25 3	8 2	7 9	348	4,260	(Oct. 13, 1904			
25 3	8 2	7 9			Jan. 30, 1908	67,744.00	676.00	Do.
56 4	36 4	17 0	1,953	42,964	Aug. 12, 1905	872.72	850.00	Do.
48 10	48 10	16 8	2,285	50,286	Mar. 10, 1906	2,691.00	2,600.00	Do.
40 0	30 6	10 0	1,150	12,523	Oct. 4, 1906	2,807.91	2,800.00	Do.
26 0	18 0	17 0	425	9,340	Dec. 30, 1905	1,167.77	1,100.00	Do.
24 0	16 0	8 0	345	4,096	Feb. 13, 1906	313.65	300.00	Do.
33 0	29 0	12 6	896	10,752	Aug. 31, 1903	2,000.00	2,000.00	Do.
16 0	12 0	11 0	190	2,352	Feb. 14, 1907	239.90	225.00	Do.
134 6	61 6	25 0	9,047	294,073	Apr. 24, 1909.	21,600.00	21,600.00	Do.
1,027 0	(a)	34 0			Jan. 4, 1908..	8,460.70	8,400.00	Do.
16 0	12 0	10 0	178	2,304	Oct. 24, 1906.	200.00	200.00	Do.
24 0	16 0	10 0	364	4,861	do	544.45	540.00	Do.
300 0	50 0	22 4	30,000	582,000	Jan. 3, 1910..	18,285.95	18,285.00	Do.
14 2	10 2	8 0	144	1,386	May 31, 1909.	276.90	276.00	Do.
73 0	21 6	8 0	1,569	18,049	Apr. 30, 1909.	517.81	517.00	Do.
84 4	68 0	49 0	15,452	178,472				
55 3	47 4	27 6	6,771	83,368				
98 2	51 2	46 0	7,299	102,844		8,460.70	8,460.00	Do.
41 0	19 2	19 9	2,426	19,152				
1,000 0	(a)	33 3			Oct. 11, 1909.			
249 4	170 3	46 6	164,665	2,155,922				
80 2	30 3	11 9	2,400	43,839	June 1, 1910..	1,800.00	1,800.00	Do.
							1,200,625.00	
							1,261,825.00	

* Top, 8 feet; bottom, 20 feet.

No. 6.—Statement showing character, value, and condition of the buildings

SACKETTS HARBOR.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Officers' quarters.</i>					
A	Commandant (not occupied).....	Brick.....	Stone.....	3½	Wood.....
B	Ship keeper.....	do.....	do.....	3½	do.....
Total.....					
<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
1	Gun shed.....	Wood.....	Stone.....	1	Wood.....
2	Stable and storehouse.....	do.....	do.....	2	do.....
3	Ice house.....	do.....	do.....	1½	do.....
4	Well house.....	do.....	do.....	1	do.....
5	Boathouse.....	Brick.....	Stone.....	1	do.....
6	Carpenter shop.....	Wood.....	do.....	1½	do.....
Total.....					
Grand total.....					

SAN JUAN.

<i>Officers' quarters.</i>					
A	Commandant.....	Rubble.....	Rubble.....	2	Brick.....
C	Surgeon.....	do.....	do.....	2	do.....
E	Paymaster.....	do.....	do.....	2	do.....
G	Hospital steward.....	do.....	do.....	1	do.....
H	Boatswain.....	do.....	do.....	1	do.....
Total.....					
<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
1	General offices.....	Rubble.....	Rubble.....	1	Brick.....
2	Squadroom and storeroom.....	do.....	do.....	1	Concrete.....
3	Sick quarters.....	do.....	do.....	1	Brick.....
4	Guardhouse.....	do.....	do.....	1	do.....
5	Squadroom and store.....	do.....	do.....	1	do.....
7	Brig.....	do.....	do.....	1	do.....
8	Storeroom.....	do.....	do.....	1	do.....
9	do.....	do.....	Rubble.....	1	Brick.....
10	Squadroom.....	do.....	do.....	1	do.....
10	Shop, distilling and electric plants, pump, and coal sheds.....	do.....	do.....	1	do.....
13	Library, etc.....	do.....	do.....	1	do.....
15	Store.....	do.....	do.....	1	do.....
16	do.....	do.....	do.....	1	do.....
17	Mess hall and kitchen.....	do.....	do.....	1	do.....
17	Latrines.....	Brick and wood.....	None.....	1	Tin.....
19	Store, magazine, and tank.....	Rubble.....	Rubble.....	2	Concrete.....
24	Custom-house store.....	Wood.....	None.....	1	Iron.....
25	Custom-house.....	Rubble.....	Rubble.....	1	Brick.....
26	Store.....	do.....	do.....	1	do.....
27	do.....	do.....	do.....	1	do.....
28	Paint shop.....	do.....	do.....	1	do.....
29	Store.....	Wood.....	None.....	1	Iron.....
30	do.....	do.....	do.....	1	do.....
30	Canteen.....	do.....	do.....	1	do.....
30	Lumber shed for general storekeeper.....	Wood.....	None.....	1	Iron.....
31	Tools, etc.....	do.....	do.....	1	do.....
32	Carpenter shop.....	do.....	do.....	1	do.....
33	Stores.....	do.....	do.....	1	do.....
33	Coaling tools.....	Wood.....	None.....	1	Iron.....
34	Store.....	do.....	do.....	1	do.....
35	Stable.....	do.....	do.....	1	do.....
36	Martine sergeant's quarters.....	Rubble.....	Rubble.....	1	Brick.....
37	Store.....	do.....	do.....	1	do.....
38	Gardener's quarters.....	Wood.....	Frame.....	1	Iron.....
Total.....					
Grand total.....					

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

SACKETTS HARBOR.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
40 0	32 0				1847.		\$6,000.00	Poor.
40 0	26 0				1847.		3,000.00	Good.
							9,000.00	
60 0	15 0				1863.		350.00	Poor.
40 0	28 0				1847.		400.00	Fair.
22 0	16 0				1850.		200.00	
10 0	10 0						50.00	Poor.
21 0	16 0				1852.		50.00	Do.
44 0	22 0				1852.		150.00	Do.
							1,200.00	
							10,200.00	

SAN JUAN.

54 0	33 0	31 0	1,882	58,340	Unknown...	Unknown...	\$4,750.00	Good.
55 0	35 0	27 0	1,820	36,820	Unknown...	Unknown...	3,000.00	Do.
50 0	35 0	27 0	1,645	34,020	Unknown...	Unknown...	3,000.00	Do.
34 0	30 0	18 0	1,020	17,820	Unknown...	Unknown...	1,000.00	Do.
128 0	22 0	13 0	2,920	37,960	Unknown...	Unknown...	3,500.00	Do.
							15,250.00	
115 0	72 0	21 0	6,400	114,450	Unknown...	Unknown...	8,200.00	Do.
119 0	70 0	19 0	5,282	91,350	do.	Unknown...	3,800.00	Do.
82 0	53 0	18 0	3,250	55,250	do.	Unknown...	4,000.00	Do.
60 0	25 0	10 0	1,390	20,550	do.	Unknown...	1,800.00	Do.
102 0	48 0	18 0	2,740	43,840	do.	Unknown...	3,600.00	Fair.
75 0	24 0	16 0	1,680	23,320	do.	Unknown...	1,700.00	Do.
101 0	73 0	16 0	2,290	34,350	Unknown...	Unknown...	3,000.00	Good.
103 0	24 0	18 0	2,410	38,560	Unknown...	Unknown...	2,500.00	Fair.
110 0	89 0	16 0	5,170	77,130	Unknown...	Unknown...	4,000.00	Do.
54 0	38 0	26 0	1,510	62,750	Unknown...	Unknown...	2,300.00	Good.
100 0	17 0	10 0	1,700	17,000	Unknown...	Unknown...	600.00	Do.
206 0	33 0	17 0	8,180	139,000	Unknown...	Unknown...	7,000.00	Do.
16 0	10 0	12 0	160	2,080	1899.	Unknown...	300.00	Do.
31 0	24 0	37 0	800	29,600	Unknown...	Unknown...	2,000.00	Do.
81 0	67 0	15 0	5,280	63,160	Unknown...	Unknown...	600.00	Do.
204 0	67 0	20 0	15,200	273,600	Unknown...	Unknown...	14,000.00	Do.
63 0	20 0	15 0	1,320	18,480	Unknown...	Unknown...	1,000.00	Do.
63 0	20 0	15 0	1,320	18,480	Unknown...	Unknown...	1,000.00	Fair.
85 0	16 0	10 0	1,245	11,185	Unknown...	Unknown...	1,000.00	Poor.
66 0	26 0	14 0	1,625	21,125	Unknown...	Unknown...	50.00	Bad.
165 0	26 0	14 0	4,300	73,000	Unknown...	Unknown...	1,200.00	Fair.
64 0	25 0	12 0	1,612	19,344	June, 1907.	\$544 27	500.00	Good.
16 0	16 0	10 0	256	2,560	Unknown...	Unknown...	75.00	Fair.
87 0	24 0	11 0	2,088	22,968	Unknown...	Unknown...	300.00	Poor.
57 0	28 0	11 0	1,596	17,556	Unknown...	Unknown...	500.00	Do.
95 0	17 0	12 0	1,615	19,380	Unknown...	Unknown...	300.00	Do.
66 0	40 0	11 0	2,640	29,640	Unknown...	Unknown...	500.00	Do.
55 0	30 0	20 0	1,080	29,600	Unknown...	Unknown...	2,500.00	Good.
200 0	29 0	15 0	5,800	87,000	Unknown...	Unknown...	5,000.00	Do.
28 0	16 0	12 0	448	5,376	April, 1909.	350.00	350.00	Do.
							73,675.00	
							88,925.00	

No. 6.—Statement showing character, value, and condition of the buildings

TUTUILA.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures.</i>					
1	Commandant's residence	Wood	Concrete	2	Iron
2	Storehouse	Concrete	do	1	do
3	Enlisted men's quarters	Wood	Iron	1	do
5	Officers' quarters	do	Wood	1	do
6	Coal sheds	Steel	Concrete	1	do
7	Storehouse	do	do	1	do
8	Ice plant	Wood	do	2	do
9	Storehouse, ship's	do	Wood	1	do
10	Storehouse	do	do	1	do
11	Ice house, ship's	do	do	1	do
12	Paint and oil shop	do	Iron	1	do
13	Blacksmith shop	do	Concrete	1	do
14	Carpenter's shop	do	do	2	do
15	Lamp house	do	Wood	1	do
16	Magazine	do	do	1	do
17	Printing office	do	Steel	1	do
18	Prison, ship's	do	Wood	1	do
19	Captain of yard office	do	Concrete	1	do
20	Officers' quarters	do	do	2	do
21	Office building	do	do	2	do
22	Hospital office	do	Steel	1	do
23	Hospital	do	Wood	1	do
24	Lumber shed	do	Steel	1	do
25	Officers' quarters	do	Concrete	1	do
26	do	do	do	2	do
27	Boat shed	do	Steel	1	do
28	Lumber shed	do	do	1	do
29	Bake shop	Iron, wood, and concrete	Wood	1	do
30	Officers' quarters, improvised	Wood	do	1	do
31	Barracks, guard	Wood and concrete	Concrete	2	do
32	Operating room	Wood	do	1	do
33	Central station telephone	do	Wood	1	do
Total					

WASHINGTON.

<i>Officers' quarters.</i>					
A	Commandant	Brick	Brick	2½	Slate
B	Captain of the yard	do	do	2½	do
C	Inspector of ordnance	do	do	3	Tin
D	Assistant inspector of ordnance	do	do	3	do
E	General storekeeper	do	do	3	do
F	do	do	do	3	do
G	Surgeon of yard	do	do	3	do
H	Assistant inspector of ordnance	do	do	2	do
K	do	do	do	3	do
L	Assistant inspector of ordnance	do	do	3	do
M	Chemist	do	do	3	do
N	Assistant inspector of ordnance	do	do	2	Slate
O	do	do	do	2	do
R	Naval constructor	do	do	2½	do
Total					
<i>Workshops, storehouses, office, and miscellaneous structures.</i>					
1	Commandant's office	Brick	Brick	2	Tin
2	Marine barracks	do	Stone	3½	do
3	Dispensary	do	Brick	2	do
4	Quarters C and D	do	do	2	do
5	Back buildings to quarters C and D	Wood	Posts	1	do
5	Sheds in rear of quarters E, F, and G	do	do	1	do
6	Museum	Brick	Brick	2	do

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

TUTUILA.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
124 0	76 0	24 0	5,334	56,232	1903	\$14,870.00	\$14,000.00	Fair.
100 0	38 0	10 0	3,800	38,000	1901	Unknown	1,200.00	Do.
20 0	30 0	10 0	600	6,000	1902	294.00	200.00	Poor.
48 0	44 0	12 0	2,112	25,344	1899	Unknown	500.00	Fair.
150 0	100 0	17 0	15,000	255,000	1902	282,262.00	280,000.00	Do.
30 0	50 0	10 0	1,500	15,000	1902	Unknown	1,000.00	Do.
60 0	29 0	14 0	1,740	24,360	1904	7,650.98	7,000.00	Do.
32 0	20 0	10 0	640	6,400	1903	330.00	200.00	Do.
32 0	20 0	10 0	640	6,400	1903	330.00	200.00	Do.
16 0	16 0	10 0	256	2,560	1903	213.00	100.00	Do.
24 0	24 0	10 0	576	5,760	1904	147.09	100.00	Do.
24 0	28 0	10 0	672	6,720	1904	247.15	200.00	Do.
60 0	20 0	22 0	1,800	61,600	1904	2,575.85	2,500.00	Good.
6 0	10 0	10 0	60	600	1902	75.00	30.00	Fair.
14 0	12 0	9 0	168	1,512	1903	184.12	50.00	Do.
16 0	16 0	10 0	256	2,560	1899	Unknown	50.00	Do.
16 0	16 0	10 0	256	2,560	1902	171.00	50.00	Do.
48 0	44 0	10 0	2,112	21,120	1900	Unknown	600.00	Do.
50 0	48 0	22 0	2,400	52,800	1897	Unknown	1,000.00	Do.
60 0	52 0	24 0	3,120	74,880	1904	10,000.00	9,500.00	Do.
22 0	33 0	10 0	726	7,260	1903	296.37	200.00	Do.
44 0	32 0	10 0	1,408	14,080	1900	Unknown	No.	Very poor.
60 0	30 0	10 0	1,800	18,000	1905	678.48	600.00	Good.
27 0	23 0	10 0	621	6,210	Unknown	Unknown	100.00	Poor.
60 0	48 0	20 0	2,880	57,600	1906	4,986.26	4,900.00	Good.
60 0	18 0	9 0	1,080	9,720	1906	491.86	400.00	Do.
45 0	30 0	10 0	1,350	13,500	1906	437.33	400.00	Do.
16 0	22 0	10 0	352	3,520	1906	351.93	300.00	Fair.
20 0	30 0	10 0	600	6,000	(a)	(a)	(a)	
77 0	28 0	20 0	4,312	86,240	1908	5,000.00	5,000.00	Good.
34 0	30 0	14 0	774	10,836	1907	1,000.00	1,000.00	Do.
14 0	8 0	8 0	112	896	1901	Unknown	50.00	Fair.
							331,430.00	

WASHINGTON.

42 0	26 0	20 11	3,297	105,942	1848		\$8,000.00	Fair.
49 0	45 0	32 0						
77 6	22 0	22 0						
23 0	20 0	18 6	2,891	73,570	1848		5,000.00	Do.
44 0	24 0	43 0						
44 0	24 0	43 0	1,493	53,926	1879	\$5,956.00	5,000.00	Do.
49 0	28 0	33 3	1,372	55,944	1880	5,956.00	5,000.00	Do.
49 0	23 0	38 3	1,127	45,954	1880		3,500.00	Do.
49 0	24 0	38 3	1,889	47,914	1880		2,000.00	Do.
40 6	23 0	21 6	1,889	47,914	1880		3,500.00	Do.
68 0	35 7	37 3	2,420	94,358	1868 1891		14,000.00	Do.
30 0	30 0	31 0						
30 0	30 0	31 0	950	34,200	1866 1891		5,000.00	Do.
30 0	30 0	31 0	950	34,200	1866 1891		5,000.00	Do.
43 0	27 0	23 6	1,161	31,592	1890	7,000.00	7,000.00	Good.
							66,500.00	
43 10	48 9	22 0	2,196	71,342	1848		22,000.00	Fair.
152 0	46 0	48 3	6,962	390,226	1882	36,908.00	45,000.00	Good.
73 6	21 4	22 6	1,568	40,768			5,686.00	Do.
39 10	18 3	18 8	727	17,266	1864		500.00	Fair.
22 10	13 5	8 5	303	2,727	1864			
33 6	18 3	8 9	1,528	15,280			200.00	Do.
60 2	30 1	24 0	1,812	47,112			4,000.00	Do.

(a) Not known; built at no expense to the Government.

No. 6.—Statement showing character, value, and condition of the buildings

WASHINGTON—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, offices, and miscellaneous structures—Continued.</i>					
7	Ox stable.....	Stone.....	Stone.....	1	Shingle.....
8	Yard stable.....	Brick.....	do.....	2	Slate.....
14	Storehouse at brow (ropes).....	Wood.....	Brick.....	1	Tin.....
21	Pattern storehouse.....	Brick.....	Stone.....	2	Slate.....
22	Foundry.....	do.....	do.....	1	do.....
23	Foundry.....	do.....	do.....	1	Slate.....
24	Locomotive house.....	do.....	do.....	1	do.....
25	Buffing house.....	Wood.....	Brick.....	1	Tin.....
27	Yard and dock paint shop.....	Brick.....	Concrete.....	1	do.....
28	Store No. 10.....	do.....	Stone.....	2	do.....
29	Timber shed.....	Galvanized iron.....	Brick, concrete.....	1	Galvanized iron.....
30	Pattern shop, west wing.....	Brick.....	Stone.....	2	Slate.....
31	Pattern shop, east wing.....	do.....	do.....	2	do.....
32	Erecting shop.....	do.....	Brick.....	1	do.....
33	West gun-carriage shop.....	do.....	do.....	1	do.....
35	South gun-carriage shop.....	do.....	do.....	1	do.....
36	East gun-carriage shop.....	do.....	do.....	1	do.....
37	Water-closets in square.....	do.....	Stone.....	1	Tin.....
39	Pneumatic power house.....	do.....	do.....	2	Slate.....
40	Annex to north gun shop.....	do.....	Concrete.....	1	Tin.....
41	North gun shop.....	do.....	do.....	1	Slate.....
42	South gun shop.....	do.....	Stone.....	1	do.....
44	Ordnance office.....	do.....	Concrete.....	3	do.....
46	Cartridge-case shop.....	do.....	Stone.....	1	do.....
47	Cartridge-case foundry.....	do.....	do.....	1	do.....
48	Plumber and tin shops, and steam-engineering shop.....	do.....	do.....	2	do.....
51	Boat house.....	Wood.....	Piles.....	2	Tin.....
53	do.....	do.....	Posts.....	1	do.....
55	Lumber shed.....	Iron columns, open sides.....	Piles.....	1	Slate.....
57	Board offices.....	Brick.....	Concrete.....	3	do.....
58	General store and offices.....	do.....	Stone.....	3	do.....
59	Commandant's stable.....	do.....	Brick.....	1	Tin.....
60	Tool house, quarters A.....	Wood.....	do.....	1	Slate.....
61	Commandant's greenhouse.....	Glass.....	do.....	1	Glass.....
62	Storehouse, rear quarters A.....	Brick.....	do.....	1	Slate.....
64	Shed at east gate.....	do.....	do.....	1	do.....
66	Annex to cartridge-case factory.....	do.....	Stone.....	1	Tin.....
67	Boiler house and stack, cartridge-case factory.....	do.....	do.....	1	Slate.....
68	Construction and repair storehouse.....	Wood.....	do.....	1	Tin.....
69	Yards and docks scale house.....	Brick.....	Concrete.....	1	Slate.....
70	Experimental model basin.....	do.....	do.....	1	Tin.....
71	Oil tanks.....	do.....	do.....	1	do.....
72	Storehouse for track material.....	Wood.....	Brick.....	1	do.....
73	Secondary mount shop.....	Brick.....	Stone.....	1	Slate.....
74	Storehouse for guns and mounts.....	Iron, brick.....	Concrete piers.....	1	do.....
75	Powder house.....	Brick.....	Concrete.....	1	Tin.....
76	New breech mechanism shop.....	do.....	Stone.....	1	Slate.....
100	Torpedo-testing house.....	Wood.....	Brick.....	1	Tin.....
101	Shop and office building.....	Brick, iron.....	Concrete.....	3	Slate.....
102	Storehouse for combustible material.....	Steel.....	Concrete piers.....	1	Steel.....
103	Coal-handling plant.....	Wood.....	Concrete.....	2	do.....
104	Tool shop.....	Brick.....	Stone.....	1	Slate.....
105	Gunner's workshop.....	do.....	do.....	2	do.....
106	Oil plant.....	do.....	do.....	1	do.....
107	Miscellaneous shop for ordnance.....	do.....	do.....	1	do.....
108	Seaman gunner's shop.....	do.....	Concrete.....	2	do.....
109	Pneumatic power house.....	do.....	Stone.....	1	do.....
110	Old fireproof storage building.....	Brick, iron.....	Concrete.....	1	Corrugated steel.....
111	Forge shop.....	Brick.....	Stone.....	1	Steel.....
112	Gunner's storehouse.....	do.....	Concrete.....	2	Slate.....

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

WASHINGTON—Continued.

Length.	Width.	Height of eaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>				
23 5	21 10	10 5	511	7,410	.....		\$200.00	Fair.
120 8	50 1	18 9	6,045	151,125	1884.....	\$11,928.00	10,000.00	Do.
17 0	17 0	12 9	289	4,162	1873.....		200.00	Do.
246 11	29 4	23 6	7,771	221,474	1879.....	8,000.00	18,000.00	Good.
262 10	36 0	25 6	9,463	312,279	1867.....	10,000.00	8,000.00	Fair.
265 1	65 2	38 6	17,271	777,195	1867.....			Do.
53 0	38 0	24 0	2,014	58,003	1901.....	4,500.00	4,000.00	Do.
27 9	15 5	10 10	428	6,099	1899.....		300.00	Do.
30 0	20 0	13 0	600	10,200	1895.....	2,500.00	2,100.00	Good.
250 0	79 3	35 0	19,813	794,720	1892.....		80,000.00	Do.
200 0	25 0	14 0	5,000	80,500	1893.....	7,500.00		Do.
197 6	64 4	29 6	12,835	378,633	1899.....	21,000.00	7,000.00	Do.
145 8	50 2	28 8	7,308	209,476	1854.....	40,000.00	55,000.00	Do.
134 6	80 0	39 3	10,760	523,157	1900.....	15,000.00		Do.
306 9	65 3	39 3	23,930	463,471	1855.....	20,000.00	35,000.00	Do.
186 0	65 3	4 0	12,137	599,204	1855.....	60,000.00	60,000.00	Do.
432 0	65 3	39 6	28,188	1,370,749	1855.....	140,000.00	140,000.00	Do.
52 5	10 4	13 3	542	8,423	.....	3,000.00	2,500.00	Fair.
62 11	50 11	35 0	3,208	136,340	1890.....	9,030.00		Good.
165 8	38 4	15 4	6,357	123,962	1899.....	11,243.00		Do.
248 6	101 7	59 8	25,274	1,811,800	1892.....	15,000.00	15,000.00	Do.
427 11	80 0	33 0	34,234	1,507,930	1910.....	25,750.00	25,750.00	Do.
83 9	41 9	44 6	3,497	1,454,945	1892.....	200,294.00	200,294.00	Do.
306 1	65 1	35 0	19,920	921,224	1899.....	247,627.00	272,974.00	Do.
130 4	43 2	24 0	5,625	168,750	1899.....	25,347.00		Do.
98 8	40 1	24 0	3,999	119,970	1899.....	50,000.00	50,000.00	Do.
83 7	36 11	16 0	3,176	76,224	1899.....	19,623.00		Do.
30 5	9 3		281		1893.....	50,000.00	69,623.00	Do.
172 2	31 6	11 9	5,425	103,075	1853.....	2,500.00	2,000.00	Bad.
153 10	41 10	40 5	6,430	333,200	1856.....	2,000.00	2,000.00	Do.
204 2	44 1	38 5	9,894	504,594	1896.....	30,000.00	1,500.00	Bad.
26 11	35 3	11 6	1,854	28,095	1901.....	18,877.00	48,877.00	Good.
14 3	14 0	9 4	200	2,134	1859.....	60,000.00	60,000.00	Do.
59 0	9 9	5 10	573	5,175	.....	3,500.00	3,500.00	Fair.
30 2	14 1	9 9	426	5,112	.....	50.00	50.00	Do.
22 5	15 4	8 10	344	4,128	.....	300.00	300.00	Do.
51 8	43 6	14 8	2,248	35,968	.....	1,000.00	1,000.00	Good.
47 1	33 3	23 3	1,478	40,139	.....	150.00	25.00	Bad.
79 2	31 3	16 0	2,475	42,818	.....	6,000.00	6,000.00	Good.
30 2	15 2	9 0	459	6,151	.....	50,000.00	70,581.00	Do.
18 3	18 3	14 3	353	5,661	1897.....		75.00	Bad.
503 0	52 6	14 8	26,396	599,406	1897.....	1,271.00	1,271.00	Good.
36 0	18 3	15 3	659	11,862	1897.....	105,000.00	105,000.00	Do.
15 3	14 9	11 4	226	3,187	1898.....		1,000.00	Do.
251 0	65 2	30 7	16,357	785,137	1898.....	83,000.00	360.00	Do.
492 3	55 6	24 6	27,320	892,453	1898.....	83,000.00	73,000.00	Fair.
31 4	14 0	14 0	439	6,141	1905.....	27,240.00		Good.
230 0	80 0	33 0	20,000	830,000	1899.....	70,000.00	97,240.00	Do.
58 0	27 4	17 0	1,596	35,628	1900.....	1,395.00	1,395.00	Do.
224 0	45 8	53 9	10,229	689,840	1899.....	110,000.00	110,000.00	Do.
92 0	53 0	20 0	4,876	66,816	1900.....	9,702.00	11,459.00	Do.
87 0	52 0	20 0	2,784	66,816	1902.....	100,000.00	130,000.00	Do.
102 3	72 10	42 0	7,477	355,158	1903.....	30,000.00	4,000.00	Do.
251 0	65 2	39 7	16,359	785,137	1901.....	40,000.00	40,000.00	Do.
296 0	60 0	29 7	12,390	295,280	1901.....	85,300.00	86,300.00	Do.
42 11	32 11	23 1	1,413	39,564	1901.....	80,800.00	80,800.00	Do.
251 0	65 2	39 7	16,359	785,137	1902.....	19,518.00	19,518.00	Do.
287 0	39 5	36 6	10,527	331,506	1902.....	86,300.00	86,300.00	Do.
100 7	32 6	39 4	5,898	246,640	1902.....	40,000.00	40,000.00	Do.
99 8	40 10	19 9	4,071	104,828	1903.....	42,600.00	42,600.00	Do.
285 2	80 0	33 7	21,213	917,962	1903.....	9,000.00	4,500.00	Good.
206 0	60 0	30 7	12,360	593,280	1903.....	73,310.00	73,310.00	Fair.
						86,300.00	86,300.00	Do.

No. 6.—Statement showing character, value, and condition of the buildings

WASHINGTON—Continued.

No.	Use.	Material.	Foundation.	Number of stories.	Kind of roof.
<i>Workshops, storehouses, office, and miscellaneous structures—Continued.</i>					
113	Coppersmith shop	Brick	Concrete	1	Slate
114	Bronzing and plating house	do	do	1	do
116	Power-plant extension	do	do	2	Slate on concrete.
117	Coal-handling plant	Steel, wood	do	0	None
118	Electric power-plant extension	Brick	do	1	Slate
119	Pipe fitter's shop	do	do	1	do
120	Seamen gunners' quarters	Wood	Brick piers	2	Roofing paper.
121	Pumping station	Brick	Concrete	1	Tin
122	Fire and telephone station	Stone, brick	do	2	Tile
123	Electric winch	do	do	1	Slate
124	Storage bins for scrap metal	do	do	1	Tin
126	Wireless-telegraph station	do	do	2	Slate
126	Construction shed	do	do	1	Tin
127	Mustard room	do	do	1	do
128	Railroad-gate guardroom	do	do	1	do
129	Sawmill	Wood	Wood	1	Roofing paper.
130	Power house	do	Stone	1	Tin
131	Coal shed	do	Concrete piers	1	do
132	Model storeroom	do	Brick	2	do
133	Temporary storehouse	do	Stone	1	do
134	Band stand	do	Brick piers	1	do
135	Storage bins for perishable material	Brick	Piers, concrete piers	1	Ferro-inclave steel.
136	Fireproof storehouse for fuses, acids, and oils	do	do	1	Steel, cinder concrete.
	Total				
	Grand total				

at the navy-yard at the end of the fiscal year June 30, 1910—Continued.

WASHINGTON—Continued.

Length.	Width.	Height of ceaves.	Total floor space.	Cubical contents.	Date.	Cost.	Value.	Condition.	
<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Sq. ft.</i>	<i>Cu. ft.</i>					
110 0	60 0	37 0	6,600	283,800	1903.....	\$32,000.00	\$32,000.00	Fair.	
60 0	40 0	22 10	2,400	69,200	1903.....	20,000.00	20,000.00	Do.	
165 3	103 3	46 0	17,062	1,031,520	1905.....	200,964.00	200,964.00	Do.	
264 0	91 0	8 0	22,023	176,176	1904.....	64,084.00	64,084.00	Do.	
193 2	70 0	33 6	2,100	70,350	1905.....	75,000.00	172,983.00	Do.	
74 0	40 0	22 6	16,662	1,035,687	1905.....	97,983.00	20,000.00	Do.	
140 6	48 6		2,960	82,436	1906.....	20,000.00		Do.	
48 6	26 0	21 0	8,691	239,348	1904.....	1,221.00	12,129.00	Do.	
20 3	25 6					10,908.00			
20 2	11 6	16 0	720	9,943	1904.....	6,931.00	6,931.00	Do.	
52 4	32 4	10 10	1,692	38,919	1906.....	14,000.00	14,000.00	Do.	
49 3	15 0	23 0	847	9,736	1904.....	1,056.00	1,056.00	Do.	
14 4	7 0	9 8							
203 0	17 0	11 0	3,451	37,961	1905.....	1,892.00	800.00	Fair.	
33 9	17 0	19 0	574	12,120	1906.....	3,379.00	3,379.00	Good.	
21 8	17 0	11 6	370	4,262	1904.....	202.00	100.00	Fair.	
41 6	17 0	11 9	705	8,290	1904.....	404.00	300.00	Do.	
21 5	11 7	12 10	247	2,964					
22 8	21 10	7 8	476	3,635	1905.....	147.00	147.00	Fair.	
118 10	29 8	29 6	3,527	117,190	1902.....	2,371.00	2,371.00	Poor.	
100 10	21 0	33 0	2,100	44,100	1902.....	2,042.00	2,042.00	Do.	
191 6	23 4	34 3	4,468	166,233	1903.....	4,078.00	4,078.00	Do.	
85 6	23 6	14 3	2,009	34,655			1,500.00	Do.	
20 0	20 0	14 6	325	3,250	1904.....	500.00	500.00	Good.	
138 0	30 0	11 0	3,973	43,703	1909.....	6,000.00	6,000.00	Do.	
72 11½	40 0	20 0	2,920	58,400	1910.....	4,906.00	4,906.00	Do.	
							3,283,131.00		
							3,349,631.00		

LIST OF BUILDINGS ON TARGET RANGE, GUANTANAMO.

1. Enlisted men's club: Wooden building, 88 by 46 feet; 12-foot veranda on four sides; porch in front.
2. Camp storehouse: Wooden building on Deer Point, 46 by 46 feet; addition with signal tower 10 by 10 feet; 8-foot veranda on four sides.
3. Officers' bath house and water-closet on Deer Point, 20 feet by 16 feet 6 inches.
4. Men's bath house and water-closet on Deer Point, 50 by 10 feet.
5. Latrine on Deer Point, 12 by 10 feet.
6. Latrine on Deer Point, 12 by 10 feet.
7. Boathouse near No. 1 landing, 25 by 20 feet.
8. Range office, 24 feet 5 inches by 17 feet, with L 14 by 13 feet; porch on three sides.
9. Men's barracks, 95 by 40 feet, with veranda on four sides 10 feet deep.
10. Range officer's house, 78 by 78 feet, with 15-foot veranda on four sides; servants' quarters, 18 feet 5 inches by 18 feet 5 inches; detached fowl house, 12 by 12 feet.
11. Officers' clubhouse, 92 feet by 54 feet 8 inches, with 15-foot veranda on four sides; servants' quarters and kitchen, 30 feet by 24 feet 8 inches.
12. Carpenter shop, 24 by 12 feet; 8-foot veranda on two sides.
13. Paint shop, 108 by 8 feet.
14. Men's baseball grand stand, 53 by 12 feet.
15. Officers' baseball grand stand, 25 by 12 feet.
16. Storehouse, 20 by 20 feet.
17. Storehouse, 40 by 20 feet.
18. Storehouse, 12 by 5 feet.
19. No. 1 range house, 88 by 33 feet, with 8-foot veranda on three sides.
20. No. 2 range house, 30 by 20 feet, with 8-foot veranda on one side.
21. Center tunnel range house, 30 feet by 15 feet 6 inches.
22. Shelter at artillery firing point, 24 by 12 feet.
23. Water-closet at pistol butts, 24 feet 6 inches by 6 feet.
24. Shelters on main firing line.
- 25.
- 26.
27. Four, each 25 by 12 feet.
28. Barracaones.
29. Two, each 100 feet by 29 feet 6 inches.
30. Barracaones.
31. Two, each 51 by 26 feet.
32. Canteen at barracaones, 22 by 18 feet.
33. Mule corral, 26 by 16 feet.
34. Feed shed at corral, 50 by 26 feet.
35. Concrete magazine, 22 by 22 feet.
36. Oil house, 24 by 6 feet.
37. Disinfecting shed, 18 by 16 feet.
38. Officers' bath house, 10 by 8 feet.
39. Fowl house at barracks, 12 by 8 feet.

List of buildings on hospital cay, Guantanamo.

Name.	Department.	Material.
1. Custodian's cottage.....	Supplies and accounts, coal- ing plant.	Wood.
2. Distilling plant.....	.....do.....	Do.
3. Standpipe.....	.....do.....	Steel and cement.
4. Double cottages (four buildings).....	.....do.....	Cement.
5. Office building.....	Equipment.....	Wood.
6. Storehouse.....	Supplies and accounts.....	Do.
7. Riggers' room.....	Construction and repair.....	Do.
8. Watchman's house.....	.....do.....	Do.
9. Blacksmith shop.....	.....do.....	Do.
10. Chinese barracaone.....	Supplies and accounts, coal- ing plant.	Do.
11. Spaniards' barracaones.....	.....do.....	Do.
12. Chinese fonda.....	.....do.....	Do.
13. Equipment storehouse.....	Equipment.....	Do.
14. Fonda for whites.....	Supplies and accounts, coal plant.	Do.
15. Barracaones for negroes.....	.....do.....	Do.
16. Corral.....	.....do.....	Do.
17. Electric plant.....	Equipment.....	Do.
18. Timekeeper's quarters.....	Supplies and accounts, coal plant.	Do.
19. Chinese restaurant.....	.....do.....	Do.
20. Sea-water pump shed.....	.....do.....	Do.
21. Coal dock.....	.....do.....	Cement and steel.
22. Coal platform.....	.....do.....	Cement.
23. Coal-handling machine.....	.....do.....	Steel.
24. Paint storeroom.....	Construction and repair.....	Wood.
25. Carpenter shop.....	.....do.....	Do.

No. 7.—Statement showing character, value, and condition of buildings at the navy-yards, fiscal year ending June 30, 1910.

SUMMARY OF VALUES.

Location.	Real property exclusive of buildings.	Buildings.	Movable prop- erty.	Total.
Boston.....	\$8,708,500.00	\$3,789,750.00	\$92,100.00	\$12,590,350.00
Cavite.....	848,950.00	507,774.00	29,475.00	1,446,199.00
Charleston.....	1,913,304.00	1,441,680.00	65,003.00	3,419,987.00
Culebra.....	50,600.00	35,785.00	2,264.00	88,649.00
Guam.....	60,470.65	39,901.66	22,129.12	128,501.43
Guantanamo.....	108,019.91	48,542.59	40,836.00	197,398.50
Hawaii.....	901,675.00	32,050.00	31,185.00	1,024,910.00
Key West.....	785,430.00	419,415.71	11,315.00	1,216,160.71
Mare Island.....	5,263,090.11	4,432,700.00	350,200.00	10,045,990.11
New London.....	84,434.36	152,250.00	5,403.31	242,087.67
New Orleans.....	978,907.52	586,528.00	13,820.60	1,579,256.12
Newport.....	97,815.10	19,025.00	7,955.25	124,795.35
New York.....	17,305,000.00	4,464,425.00	197,125.00	21,966,550.00
Norfolk.....	7,141,405.00	1,235,650.00	164,900.00	8,541,955.00
Olongapo.....	2,541,500.00	742,550.00	71,975.00	3,356,025.00
Pensacola.....	1,343,687.00	676,610.00	83,549.00	2,103,846.00
Philadelphia.....	6,467,450.00	1,994,925.00	189,190.00	8,651,565.00
Portsmouth.....	4,813,450.00	2,563,873.00	211,900.00	7,589,223.00
Puget Sound.....	1,592,380.00	1,261,825.00	93,915.00	2,948,120.00
Sacketts Harbor.....	15,500.00	10,200.00	500.00	26,200.00
San Juan.....	612,190.00	88,925.00	21,000.00	722,115.00
Tutulla.....	62,397.33	331,430.00	8,325.00	402,152.33
Washington.....	2,379,890.00	3,349,631.00	92,494.00	5,822,015.00
Total.....	64,142,045.98	28,285,445.96	1,806,559.28	94,234,051.22

No. 8.—List of dry docks and marine railways.

Yard or station.	Dock No.	Kind.	Material of which dock is constructed.	Class of maximum ship capable of being docked.	General dimensions.															
					Body of dock.					Entrance.										
					Length on coping at head of dock to outer caisson.	Length on floor of dock to outer sill.	Width at coping.	Width of keel blocks.	Depth mean high water to keel blocks.	Width at coping.	Width of floor above sill.	Depth mean high water to sill.	Govern- ing width of floor above sill.							
Portsmouth.....	2	Dry dock.	Granite and concrete.	U'tah.....	Fl. in. 739 8½	Fl. in. 130 0½	Fl. in. 696 8½	Fl. in. 130 2½	Fl. in. 101 9	Fl. in. 91 2	Fl. in. 30 2½									
Boston.....	1	do.	Granite.	Raleigh.....	384 0½	368 0½	86 1½	86 1½	101 1½	49 0	25 11½									
Do.....	2	do.	Granite and concrete.	Delaware.....	738 1	720 0	114 0	114 0	101 8½	91 4½	30 1½									
New York.....	1	do.	Granite.	Galveston.....	365 3	338 3	98 4	98 4	66 4	48 0	24 5½									
Do.....	2	do.	Concrete.	Alabama.....	461 9	.....	.....	.....	.....	.....	.....			
Do.....	3	do.	Wood.	Connecticut.....	657 0	625 4	150 10	150 10	112 5	74 0	24 4½									
Do.....	4	do.	Granite and concrete.	Largest contemplated.	694 6	694 6	139 6	139 6	112 0	76 7½	105 0									
Philadelphia.....	1	do.	Wood.	Olympia.....	492 0	459 10	133 0	133 0	112 0	31 4½	120 3½									
Do.....	2	do.	Granite and concrete.	U'tah.....	744 6½	725 10½	140 2½	140 2½	97 0½	29 10½	102 7½									
Norfolk.....	1	do.	Granite.	Raleigh.....	324 0½	303 0	86 3½	86 3½	60 0	60 0	25 1									
Do.....	2	do.	Wood.	Olympia.....	490 4½	459 8	130 2	130 2	57 0	24 9	84 7									
Do.....	3	do.	Granite and concrete.	Largest contemplated.	722 11	722 11	136 0	136 0	96 2	31 3½	112 4									
Charleston.....	1	do.	Stone and concrete.	U'tah.....	566 0	548 0	134 0	134 0	96 2	31 1½	113 0½									
Mare Island.....	1	do.	Granite.	Charleston.....	597 9½	459 1½	121 1½	121 1½	80 7	63 0	26 2½									
Do.....	2	do.	Granite and concrete.	U'tah.....	740 4	729 10½	120 0	120 0	88 0	28 9½	101 1½									
Puget Sound.....	1	do.	Wood body, masonry entrance.	Connecticut.....	636 1½	618 7½	130 1½	130 1½	73 6	25 2½	92 8½									
Do.....	2	do.	Granite and concrete.	Largest contemplated.	899 6	801 8	145 0	145 0	113 0	32 8½	123 9½									
Guantanamo.....	1	do.	do.	Largest contemplated.	717 0	717 0	138 0	138 0	114 0	32 2½	123 0									
San Pedro.....	1	do.	do.	U'tah.....	791 0	800 0	138 0	138 0	114 0	32 2½	123 0									
Pollock P. I. & Pensacola.....	1	Flooding dock.	Stone.	U'tah.....	87 11	87 11	78 0	77 0	30 0	30 0	34 5									
New Orleans.....	1	do.	Steel.	Rhode Island.....	523 0	523 0	100 0	100 0	100 0	30 0	.....								
Olongapo.....	1	do.	do.	Connecticut.....	500 2	500 2	100 0	100 0	100 0	30 0	.....								
Port Royal.....	1	Dry dock.	Wood.	Olympia.....	483 0	483 0	126 0	126 0	59 0	26 0	97 0									

Yard or station.	Dock No.	History of construction.				Channel from dock yard to sea.				Maximum draft ship for channel at mean high water. ^f	
		Date of commencement.	Date completed.	Per cent completed July 1, 1910.	Approximate date of completion.	Cost to date of completion.	Mean rise and fall of tide. ^e	Controlling depth, yard to low water. ^d	Controlling width, yard to sea.		Maximum draft ship for channel at mean low water. ^f
Portsmouth.....	2	1899	1906			\$1,122,805.69	Feet. 7.8	Feet. 40.0	Feet. 500	Largest contemplated.....	Largest contemplated.
Boston.....	1	1827	1833			972,717.29	9.6	33.0	540	Do.....	Do.
Do.....	2	1869	1905			1,101,000.00	9.6	35.0	540	Do.....	Do.
New York.....	1	1841	1851			2,003,408.05	4.0	35.0	750	Do.....	Do.
Do.....	2	1887	1890			568,019.24	4.0	35.0	750	Do.....	Do.
Do.....	3	1893	1897			554,707.08	4.0	35.0	750	Do.....	Do.
Do.....	4	1905	(A)	25	Aug., 1912		4.0	35.0	750	Do.....	Do.
Philadelphia.....	1	1889	1891			548,790.09	5.9	24.0	300	Charleston.....	Do.
Do.....	2	1899	1906			1,471,590.67	5.9	24.0	300	Do.....	Do.
Do.....	1	1827	1834			943,676.00	2.8	27.0	450	Mississippi.....	Do.
Do.....	2	1887	1889			504,980.76	2.8	27.0	450	Do.....	Do.
Do.....	3	1903	(A)		Nov., 1911		2.8	27.0	450	Do.....	Do.
Charleston.....	1	1902	1908			1,001,000.00	4.2	22.0	300	Baltimore.....	Mississippi.
Marine Island.....	1	1872	1891			2,772,332.88	4.8	20.0	300	Newark.....	Georgia.
Do.....	2	1862	1886			1,672,638.80	4.8	20.0	300	Do.....	Do.
Puget Sound.....	2	1882	1886			632,630.33	7.8	42.0	984	Largest contemplated.....	Largest contemplated.
Do.....	1	1888	(A)	50	Mar., 1912		7.8	42.0	984	Do.....	Do.
Do.....	1	1899	(B)	20	Nov., 1912		1.2	130.0	4,560	Delaware.....	Delaware.
Guantanamo.....	1	1897	1902			195,090.00	1.1	20.0	300	Largest contemplated.....	Largest contemplated.
Panama.....	1	1897	1902			809,712.52	1.1	20.0	300	Do.....	Do.
New Orleans.....	1	1892	1905			1,170,792.08	1.2	80.0	2,500	Delaware.....	Delaware.
Cincinnati.....	1	1895	1905				1.2	80.0	2,500	Largest contemplated.....	Largest contemplated.
Port Royal.....	1	1895	1905		(a)	521,566.89					

^a With the exception of Boston No. 2, New York Nos. 2 and 3, and Puget Sound No. 1, the column headed "Class of maximum ship capable of being docked," is based upon the assumption of 2 feet clearance between alars of dock at level of top of level blocks and the greatest beam of ship projected on this plane, giving a working clearance of about 5 feet between blice and dock structure with ship seated on blocks. Boston No. 2 and New York Nos. 2 and 3 can take ships shown in cases of emergency (see C. & R. letter No. 6241-A 314 (A. E.), of Nov. 28, 1910), and Puget Sound No. 1 can also take the ship shown, in cases of emergency, but in each of the four excepted docks there will be less than the assumed clearances. Table based on latest available data, Nov. 30, 1910.

^b Maximum.

^c Minimum.

^d Out of commission or abandoned.

^e Data for these columns based upon hydrographic letter 45905-10248 of Nov. 28, 1910.

^f 12-inch clearance under keel.

^g Designing for a channel 1,200 feet wide, 35 feet deep under contract.

^h Under construction.

ⁱ Original dock completed 1908, at a total cost of \$1,290,000; extension of 182 feet now under contract.

^j Started.

^k Construction suspended.

^l Pending for a channel 600 feet wide, 35 feet deep under contract.

^m Abandoned.

MARINE RAILWAYS, UNITED STATES NAVY.

Name of navy-yard or naval station.	Length.		Capacity.		Name of navy-yard or naval station.	Length.		Capacity.	
	<i>Feet.</i>	<i>Tons.</i>	<i>Feet.</i>	<i>Tons.</i>		<i>Feet.</i>	<i>Tons.</i>		
Washington, D. C.	493	500	Cavite No. 1.	305	500				
Norfolk, Va.	300	150	Cavite No. 2.	230	30				
Key West, Fla. ^a	648½	750	Cavite No. 3.	210	28				
San Juan, P. R.	65	6							

^a Under construction.

REPORT OF THE BUREAU OF EQUIPMENT.

DEPARTMENT OF THE NAVY,
BUREAU OF EQUIPMENT,
Washington, D. C., September 27, 1910.

SIR: I have the honor to submit herewith a brief report of the operations of the Bureau of Equipment for the fiscal year ending June 30, 1910, also the annual estimates for funds for the fiscal year ending June 30, 1912.

The appropriations under the cognizance of the bureau and its various branches available for use during the fiscal year were as follows:

Naval act approved March 3, 1909.

Equipment of vessels.....	\$3, 935, 400
Coal and transportation.....	5, 000, 000
Depots for coal.....	450, 000
Ocean and lake surveys.....	57, 900
Contingent, Bureau of Equipment.....	11, 281
Naval Observatory, grounds and roads.....	10, 000
Increase of the navy, equipment.....	600, 000
Total.....	10, 064, 581

Legislative, executive, and judicial act approved March 4, 1909.

Salaries:	
Bureau of Equipment.....	\$36, 900
Hydrographic Office.....	102, 200
Nautical Almanac Office.....	22, 440
Naval Observatory.....	43, 240
Contingent and miscellaneous expenses:	
Hydrographic Office.....	35, 960
Naval Observatory.....	18, 750
Pilot chart, North Pacific Ocean.....	2, 000
Total.....	261, 490

Summary.

Naval appropriation act.....	\$10, 064, 581
Legislative, executive, and judicial appropriation act.....	261, 490
Total.....	10, 326, 071

These appropriations were sufficient to meet the requirements of the bureau, though they could only be made to do so by the exercise of the most rigid economy and by denying to the service many articles necessary for its comfort and welfare. This is especially true in

the matter of expenditures under the appropriation "Equipment of vessels."

As the equipment departments of the various navy-yards have been successfully merged into the manufacturing departments, the expenditures for work at the various navy-yards and naval stations are omitted.

During the year the bureau adopted a simplified and most efficient method of housing anchors, which permits of the omission of several ring bolts and deck stoppers hitherto deemed absolutely necessary. This method will be adopted for vessels of the *Florida* and *Arkansas* class and all other vessels to be constructed.

Rain suits were added to the allowance list of vessels, so that running boat's crews are now provided with these necessary outfits.

The bureau installed a sounding machine forward on the *Iowa* for test on the Naval Academy practice cruise, to determine the practicability of this location for a sounding machine. No report of the results were received, however, prior to the abolishment of the bureau.

OFFICES OF INSPECTORS OF ELECTRICAL APPLIANCES.

The general policy of the bureau, as outlined in its report for the year 1909, was pursued during the fiscal year 1910, special attention being devoted to the improvement of interior communication systems and instruments, including telephones and indicators. Experimental sets of direct reading revolution indicators and transmitters were purchased and installed.

The experience obtained with turbo-generating sets has confirmed the intention not to purchase reciprocating engines for this purpose, except in special cases.

Plans and instructions for modifying all existing fire-control installations to comply with the report of the 1910 fire-control board were prepared and issued to all navy-yards, and all changes made in interior communication and fire-control systems were made in accordance with that report.

The first turret danger-zone signal instruments were preliminarily tested, with satisfactory results.

Metal-filament lamps of various types were purchased and installed for experimental purposes, but found not to be sufficiently robust for general ships' use. They have been found satisfactory for signaling purposes, and are a great improvement in this respect over lamps with carbon filaments, on account of quick heating up and lack of afterglow. The constant improvement in this type of lamp indicates that it will soon be available for general incandescent lighting aboard ship. The results of experiments have shown the superiority of mercury vapor lamps over arcs for fire and engine room lighting, and they have been definitely adopted for this service.

The bureau has continued to devote special attention to the simplification of wiring, lighting, and appliances, with a view to reducing weight while maintaining efficiency.

Changes in specifications for wire supplies have been made, with a view of obtaining an insulation of greater heat-resisting qualities.

Extensive tests with electric baking and cooking appliances have been carried on, with the result of demonstrating the superiority in many respects of electric ranges and bake ovens over the ordinary

type using coal, and provision has been made for installing them on battle ships and submarines building. It has also been found advantageous in some cases to replace steam heaters by electric heaters on board large vessels.

The purchase and installation of 36-inch searchlights, to comply with the reports of the torpedo-defense and fire-control boards, has been continued.

WIRELESS TELEGRAPHY.

Improvement in the equipment and efficiency of wireless-telegraph installations has been steady and satisfactory. Modern high-frequency apparatus is being purchased for a number of vessels and shore stations, and apparatus installed on the scout cruisers *Birmingham* and *Salem* and the *Connecticut* have been tested as far as the services of these ships would permit. The results of these tests indicate that these 10 and 25 kilowatt sets are better suited for shore stations, where suitable higher antennæ of greater capacity can be used.

The matter of the erection of the high-powered station in Washington has been pending on account of the lack of funds necessary to proceed with the work and the difficulty of obtaining a suitable site.

Several sets of portable wireless-telegraph apparatus have been manufactured for test on the *North Carolina*, *Montana*, and *Chester*. These portable sets are intended to be used during battle, the maximum range to be in the neighborhood of 20 miles. The aerial of the ship's long-distance set could be taken down before battle when the ship was cleared, and the small set used with a wire hoisted to the yardarm, the operator and his small portable outfit being in any protected position—for instance, in the lee of armor inside on the upper deck. It is expected that this type of apparatus can be so developed as to give very satisfactory service for short distances and can be modified for use with landing parties and at lookout stations along the coast.

Considerable work of an experimental nature has been done at the wireless laboratory at the Bureau of Standards and at the station at Braut Rock, Mass., where a 100-kilowatt set for the Washington station is installed. These experiments were carried out in connection with the installation on the scout cruisers.

The work on the coastal stations has been satisfactory as a whole, but many improvements are required, principally in the line of furnishing high-frequency apparatus and more durable masts or towers. It is proposed to use steel towers wherever possible, especially in the Tropics.

The number of messages handled for the Navy, Weather Bureau of the Department of Agriculture, and for private persons has increased steadily. Storm warnings, weather reports, and time signals are sent out broadcast as often as obtained, also notices of obstructions, changes of lights, etc.

Plans are being formulated for increasing the power of wireless apparatus at navy-yards and stations and the reduction of the number of unprotected coastwise stations.

A modern high powered station has been installed at Colon and is in excellent condition. This station has given very satisfactory results and is able to communicate with Key West every night in the

year except in the summer months when static conditions make communication in the Tropics irregular. Other stations of similar power are to be erected at Key West and on the island of Porto Rico. It is expected that these stations will afford constant communication between the United States and the stations at San Juan, Guantanamo, and the Canal Zone. The necessity of moving the Colon station to a site on higher ground near the middle of the Canal Zone for communication with ships in both oceans is recognized.

SUBMARINE SIGNALLING.

Arrangements have been made to complete the installation of receiving apparatus for submarine signals on all battle ships, cruisers, and destroyers. All submarines and their tenders are fitted with both transmitting and receiving apparatus.

NAVAL OBSERVATORY AND HYDROGRAPHIC OFFICE.

In view of the fact that the Bureau of Equipment was discontinued on June 30 last by legislation, it is understood the report of the Superintendent of the Naval Observatory and the Hydrographer have been submitted direct to the department.

CHIEF OF BUREAU.

The appointment of Rear-Admiral William S. Cowles, U. S. Navy, retired, Chief of the Bureau of Equipment, expired January 21, 1910. From that date until its discontinuance the bureau was without an executive head other than the chief clerk.

DISCONTINUANCE OF BUREAU.

By act of Congress approved June 24, 1910, the Bureau of Equipment was discontinued after June 30, 1910, and the duties assigned to it by law and the available funds appropriated for its use were distributed amongst the other bureaus of the department, in accordance with departmental order No. 70, the distribution of the clerical force following the distribution of the duties of the bureau.

Very respectfully,

A. C. WRENN,
Chief Clerk, Bureau of Equipment.

REPORT OF THE CHIEF OF THE BUREAU OF NAVIGATION.

DEPARTMENT OF THE NAVY,
BUREAU OF NAVIGATION,
Washington, D. C., October 1, 1910.

SIR: I have the honor to submit the annual report of the Bureau of Navigation for the fiscal year ending June 30, 1910.

Rear Admiral W. P. Potter, U. S. Navy, was chief of the bureau during the period from July 1 to December 1, 1909, and was relieved by me December 2, 1909.

The following is a list of new vessels commissioned, vessels recommissioned, placed in reserve, and placed out of commission during the year:

List of new vessels commissioned during the fiscal year ending June 30, 1910.

Vessel.	Date.	Vessel.	Date.	Vessel.	Date.
Bonita.....	Nov 23, 1909	Michigan.....	Jan. 4, 1910	Stingray.....	Nov. 23, 1909
Delaware.....	Apr. 4, 1910	Narwhal.....	Nov. 23, 1909	South Carolina.....	Mar. 1, 1910
Flusser.....	Oct. 28, 1909	North Dakota.....	Apr. 11, 1910	Smith.....	Nov. 28, 1909
Graying.....	Nov. 23, 1909	Patapasco.....	July 28, 1909	Snapper.....	Feb. 2, 1910
Hector.....	Oct. 22, 1909	Preston.....	Dec. 24, 1909	Tarpon.....	Nov. 23, 1909
Lamson.....	Feb. 10, 1910	Prometheus.....	Jan. 15, 1910	Vestal.....	Oct. 4, 1909
Mars.....	Aug. 26, 1909	Reid.....	Dec. 3, 1909	Vulcan.....	Oct. 2, 1909

List of vessels recommissioned during the fiscal year ending June 30, 1910.

Vessel.	Date.	Vessel.	Date.	Vessel.	Date.
Abarenda.....	May 19, 1910	Iris.....	Oct. 15, 1909	Preble.....	Sept. 17, 1909
Adder.....	Feb. 10, 1910	Lebanon.....	June 15, 1910	Princeton.....	Nov. 5, 1909
Ajax.....	Apr. 30, 1910	Massachusetts.....	Apr. 28, 1910	Rowan.....	Dec. 21, 1909
Amphitrite.....	June 14, 1910	Moccasin.....	Feb. 10, 1910	Solace.....	Nov. 20, 1909
Arethusa.....	Oct. 15, 1909	Navajo.....	Oct. 8, 1909	Stewart.....	Nov. 18, 1909
Bailey.....	Nov. 7, 1909	Do.....	Mar. 4, 1910	Stringham.....	Aug. 14, 1909
Cuttlefish.....	Apr. 15, 1910	New Orleans.....	Nov. 15, 1909	Tarantula.....	Apr. 15, 1910
Decatur.....	Apr. 22, 1910	New York.....	May 15, 1910	Viper.....	Do.
DeLong.....	Apr. 30, 1910	Octopus.....	Apr. 15, 1910	Wheeling.....	May 3, 1910
Indiana.....	May 10, 1910	Petrel.....	May 2, 1910	Wolverine.....	May 2, 1910
Iowa.....	May 2, 1910				

List of vessels placed in reserve during the fiscal year ending June 30, 1910.

Vessel.	Date.	Vessel.	Date.	Vessel.	Date.
Amphitrite.....	June 14, 1910	Maedonough.....	Dec. 15, 1909	Stockton.....	Nov. 6, 1909
Bailey.....	Dec. 22, 1909	Marblehead.....	Mar. 31, 1910	Tarantula.....	Do.
Biddle.....	Nov. 18, 1909	Missouri.....	May 2, 1910	Thornton.....	Dec. 22, 1909
Blakeley.....	Nov. 6, 1909	New Jersey.....	Do.	Tingey.....	Do.
Chicago.....	Aug. 28, 1909	New York.....	Dec. 31, 1909	Tonopah.....	Aug. 28, 1909
Cuttlefish.....	Nov. 30, 1909	Octopus.....	Feb. 16, 1910	Vesuvius.....	Feb. 15, 1910
Davis.....	Oct. 29, 1909	Olympia.....	Aug. 28, 1909	Viper.....	Nov. 30, 1909
Decatur.....	Apr. 22, 1910	Plunger.....	Nov. 6, 1909	Wilkes.....	Dec. 22, 1909
DeLong.....	May 20, 1910	Porter.....	Nov. 18, 1909	Winslow.....	Nov. 2, 1909
Dupont.....	Nov. 30, 1909	Shubrick.....	Nov. 30, 1909	Wisconsin.....	May 21, 1910
Farragut.....	Sept. 17, 1909	St. Louis.....	Nov. 5, 1909	Worden.....	Nov. 18, 1909
Hartford.....	Aug. 28, 1909	Stringham.....	Nov. 30, 1909		

List of vessels placed out of commission during the fiscal year ending June 30, 1910.

Vessel.	Date.	Vessel.	Date.	Vessel.	Date.
Alexander.....	Apr. 15, 1910	De Long.....	Aug. 7, 1909	Nero.....	Jan. 3, 1910
Abarenda.....	Oct. 6, 1909	Galveston.....	Mar. 23, 1910	Nezinscot (lost)...	Aug. 25, 1909
Ajax.....	July 20, 1909	Iris.....	Oct. 15, 1909	Nina (lost).....	Mar. 15, 1910
Adder.....	July 26, 1909	Illinois.....	Aug. 4, 1909	Navajo.....	Jan. 3, 1910
Alabama.....	Aug. 17, 1909	Iroquois.....	Mar. 8, 1910	Do.....	May 28, 1910
Arayat.....	Apr. 11, 1910	Kentucky.....	Aug. 26, 1909	Ohio.....	Dec. 20, 1909
Arethusa.....	Oct. 15, 1909	Kearsarge.....	Sept. 4, 1909	Relief.....	Feb. 18, 1910
Alert.....		Lebanon.....	Oct. 2, 1909	St. Louis.....	May 3, 1910
Concord.....	Nov. 4, 1909	Malne.....	Sept. 1, 1909	Sterling.....	Apr. 30, 1910
Cheyenne.....	Nov. 13, 1909	Moccasin.....	July 26, 1909	Winslow.....	July 16, 1910
Denver.....	Mar. 12, 1910	Millwaukee.....	May 3, 1910		

As the needs of the navy in the matter of additional officers for the future has been gone into very thoroughly and seems fully covered by the provisions of H. R. 22319, entitled "A bill to regulate and increase the efficiency of the personnel of the United States Navy and Marine Corps," which is now before the Congress, the bureau does not desire, pending action on the bill, to make any specific recommendations at this time regarding increase of the commissioned personnel, but would earnestly invite the attention of the department to the urgent need of additional officers to properly man the fleet and perform the professional duties required on shore.

ENGINEER OFFICERS.

There are at present upon the active list of the navy 17 captains and 7 commanders, formerly engineer officers, who were transferred to the line to perform engineering duty only on shore only. These officers, in consequence, are not eligible for assignment to duty afloat or to any other shore duty than that specified.

With the increase of the navy the bureau finds that there is an insufficient number of captains and commanders to perform all the necessary duty to which officers of these grades are, by regulation, eligible for assignment. Through the operation of existing law these former engineer officers will eventually attain flag rank, but will be ineligible to perform the duties to which officers of that rank are now assigned. This will cause a shortage of officers of flag rank for duty both afloat and ashore and will thereby seriously cripple the efficiency of the fleet.

PHYSICAL TESTS.

The provisions of the executive order requiring an annual physical test by all officers have been complied with, only such exceptions having been made as circumstances of temporary illness or permanent lameness rendered advisable. This order permits the officer to choose between walking 50 miles, riding a bicycle 100 miles, or riding horseback 90 miles in certain specified numbers of hours.

As a result of the physical examinations required to be taken by the officer before and after taking the test 9 officers have been permanently excused from taking the test, 43 were excused for the year 1909 because of existing illness, convalescing from recent illness or surgical operations, and 7 were ordered before a retiring board and placed upon the retired list.

RETIREMENT IN THE NEXT HIGHER GRADE IN CASE OF PHYSICAL DISABILITY.

By the act of Congress approved October 1, 1890, and made applicable to the Marine Corps by the act approved July 28, 1892, an officer of the Army or Marine Corps who fails in his physical examination and is found incapacitated for service by reason of physical disability contracted in line of duty is retired with the rank to which his seniority entitles him to be promoted. The bureau submits that officers of the navy are entitled to equal consideration in this respect, the more so from the fact that a naval officer may be physically incapacitated for promotion after such is due him, but before the statutory examining board required can be assembled, the officer concerned being at sea or located where an examining board can not be convened.

RETIRED OFFICERS ON ACTIVE DUTY.

There are still a few retired officers employed on active duty under the law authorizing such until June 7, 1912, but as the necessity for such employment is rapidly becoming less the number is constantly being reduced, and it is hoped that by the close of the present fiscal year but few retired officers will remain on active duty.

MIDSHIPMEN AT SEA.

The bureau earnestly invites the attention of the department to the fact that midshipmen injured or incapacitated while serving the two years' probationary period at sea after graduation from the Naval Academy are not entitled to retirement. If through any cause such midshipmen are injured or rendered physically incapacitated for the performance of active duty existing law does not permit of their being retired, as is the case with all other officers.

MEDALS OF HONOR.

The bureau again invites the attention of the department to the fact commissioned officers of the navy can not receive medals of honor, no matter to what extent they may distinguish themselves in the line of their profession. There can be no good and sufficient reason for debarring officers from this inexpensive and highly prized reward.

ENGINEER DUTY.

As the number of commissioned officers in the lower grades, owing to the recently large graduating classes from the Naval Academy, has gradually increased, it is becoming practicable for the bureau to carry out more fully the terms of the "personnel act" in the matter of assigning additional line officers to duty in the engineer department of the larger vessels, and it is hoped in the near future to be able to detail three line officers, other than the senior engineer officer, for duty solely in the engineering department of each battle ship and armored cruiser. As more officers become available the ships of lesser tonnage will be assigned additional officers for this duty.

SCHOOLS FOR OFFICERS.

POST-GRADUATE COURSE IN ENGINEERING.

The school for an advanced course in engineering at the Naval Academy, under the provisions of General Order No. 27, of 1909, to which ten line officers are sent annually for a two years' course of special study in marine engineering, is now in successful operation, and the bureau has every reason to believe that the effect of these officers completing this advanced course of theoretical and practical study will be productive of much benefit to the navy, and in a few years the number of officers who have finished the special advanced course and gone back into the service will be sufficient to meet and fill all the needs for designing engineers for our future ships, as well as for all the requirements of scientifically and practically handling and running the machinery of the vessels in commission.

The bureau believes that the usefulness of this advanced school can with further experience be materially increased, and intends to develop its scope as rapidly and extensively as the conditions will justify.

SPECIAL CLASS OF OFFICERS IN ORDNANCE.

A class of young officers of the grade of ensign has been under special instruction in ordnance during the year, and while the needs of the service may not justify having such special class continuous, the bureau expects to keep under special training and study as many of the younger officers as practicable and believes that the needs of the service will be fully met thereby.

MIDSHIPMEN'S PRACTICE SQUADRON.

It is deemed to be of the greatest importance that the midshipmen, who are the coming officers of the navy, should receive their early instruction on board vessels of the type they will afterwards be required to serve in, and in compliance with the bureau's wishes in this respect the battle ships *Iowa*, *Massachusetts*, and *Indiana* were assigned to the Naval Academy to form the practice squadron for the summer of 1910. The results of this cruise have been very satisfactory and the cruise has been made more instructive to the midshipmen in practical knowledge of seamanship, ordnance, and engineering, as well as more interesting to them through the visits to the various foreign ports touched at on the cruise.

EXAMINATION OF WARRANT OFFICERS.

The law which provides that warrant officers must be examined by a board consisting of chief warrant officers is often a source of embarrassment to the bureau, as it is difficult and many times impracticable, except at much expense, to assemble such a board, particularly on the Pacific coast. It is frequently impracticable to constitute such a board on foreign stations, and in consequence the examination of officers of these grades is delayed for long periods before an opportunity affords for convening a board. This is an injustice to the officer affected, as he is deprived of the increase in his rank and

pay until he is qualified for promotion. The bureau sees no reason why warrant officers should not be examined by a regular examining board, as is the case with all other officers.

PROMOTION OF WARRANT OFFICERS.

Attention is invited to the large number of warrant officers now on the navy list who have, under existing law, attained the rank of chief in their respective grades after a service of only six years as warrant officer. The bureau regards this length of service as being entirely too short a term, and, furthermore, that the rank and commission of chief boatswain, chief gunner, chief carpenter, chief machinist, and chief sailmaker should be reserved as an advancement or promotion for those warrant officers who have served a more extended and appropriate length of time than six years and whose service records have proven their worth. Assuming, for instance, that the average length of active service of an officer after receiving his warrant to be thirty years, under the operation of the present law he will, after serving one-fifth of this time (six years), be advanced to the highest attainable grade and remain in that grade four-fifths (twenty-four years) of his total active service. The effect of this law is, therefore, to produce a most disproportionately large ratio in the highest commissioned grades, while retaining in the lower or entering grades the much smaller number, a condition of affairs existing in no other branch or grade of any naval or military service.

ENLISTED PERSONNEL.

On the 30th of June, 1910, there were in the navy 45,076 men of all ratings, an increase over the corresponding date of 1909 of 947 men. This force was distributed as follows:

List of ships and stations, with men.

	On board June 30, 1910.		On board June 30, 1910.
Adder.....	11	Moccasin.....	12
Albany.....	355	Montana.....	831
Albatross.....	71	Montgomery.....	211
Alliance.....	98	Monterey.....	148
Annapolis.....	74	Mohican.....	169
Bailey.....	11	Narwhal.....	18
Bainbridge.....	47	Nebraska.....	821
Barry.....	76	Newark.....	173
Birmingham.....	75	New Hampshire.....	836
Bonita.....	362	New Jersey.....	271
Buffalo.....	16	New Orleans.....	334
Callao.....	169	New York.....	371
California.....	34	North Carolina.....	837
Castine.....	776	North Dakota.....	690
Celtic.....	98	Octopus.....	14
Charleston.....	142	Olympia.....	64
Chattanooga.....	670	Osceola.....	20
Chauncey.....	266	Ozark.....	29
Chester.....	88	Paducah.....	153
Chicago.....	358	Panther.....	177
Choctaw.....	42	Paragua.....	34
Cleveland.....	11	Patapsco.....	35
Colorado.....	283	Patuxent.....	35
Connecticut.....	703	Paul Jones.....	77
Culgoa.....	897	Pennsylvania.....	718
Cuttlefish.....	126	Peoria.....	42
Dale.....	12	Perry.....	75
Davis.....	85	Petrel.....	131
Decatur.....	11	*Piscataqua.....	53
Delaware.....	46	*Porpoise.....	9
Des Moines.....	833	Potomac.....	35
Dixie.....	274	Prairie.....	176
Dolphin.....	256	Preble.....	73
Dubuque.....	147	Preston.....	81
Eagle.....	156	Princeton.....	139
Enterprise.....	62	Rainbow.....	231
Fish Hawk.....	21	Reid.....	78
Flusser.....	40	Relief.....	35
Fortune.....	81	Reserve Torpedo Division.....	141
Georgia.....	36	Rhode Island.....	793
Glacier.....	827	Rowan.....	33
Goldsbrough.....	149	Samar.....	34
Grampus and Pike.....	57	Salem.....	360
Grayling.....	20	Scorpion.....	78
Hartford.....	32	Severn.....	52
Helena.....	280	Shark.....	12
Hist.....	182	Smith.....	84
Hopkins.....	65	Snapper.....	18
Hull.....	59	Solace.....	45
Idaho.....	71	South Carolina.....	697
Indiana.....	688	South Dakota.....	803
Iowa.....	404	Stewart.....	67
Iris.....	433	Stingray.....	18
Kansas.....	132	Stringham.....	47
Lebanon.....	815	Supply.....	140
Lamson.....	45	Sylph.....	30
Lawrence.....	75	Tacoma.....	362
Louisiana.....	77	Tarantula.....	12
Marietta.....	845	Tarpon.....	18
Macdonough.....	160	Tecumseh.....	10
Maryland.....	62	Tennessee.....	867
Massachusetts.....	675	Triton.....	21
Massasoit.....	401	Truxtun.....	71
Mayflower.....	9	Uncas.....	26
Michigan.....	161	Vermont.....	848
Mindoro.....	697	Vicksburg.....	151
Minnesota.....	38	Villalobos.....	58
Mississippi.....	852	Viper.....	12
Missouri.....	696	Virginia.....	809
	221	Washington.....	799

	On board June 30, 1910.		On board June 30, 1910.
West Virginia.....	776	<i>Naval stations—Continued.</i>	
Wheeling.....	156	Hawaii.....	17
Whipple.....	72	Key West.....	21
Wilmington.....	139	New Orleans.....	30
Wisconsin.....	142	Newport, R. I. (Torp. Sta.).....	236
Wolverine.....	131	Olongapo.....	b 130
Wompatuck.....	16	San Juan.....	17
Yankton.....	97	Tutulla.....	84
Yorktown.....	183	Newport, R. I. (schools).....	221
In transit.....	79	Naval Home.....	21
		Camp Elliott.....	15
<i>A waiting detail.</i>		<i>Hospitals.</i>	
Wabash.....	225	(Rolls as shown below.)	
Hancock.....	619	Portsmouth, N. H.....	14
Lancaster.....	240	Wabash.....	82
Franklin.....	651	Newport, R. I.....	30
Texas.....	4	Hancock.....	73
Independence.....	302	Lancaster.....	.....
Philadelphia.....	278	Franklin.....	238
<i>Receiving ships and yard craft.</i>		Pensacola, Fla.....	5
Southery.....	60	Independence.....	221
Wabash.....	185	Canacao, P. I.....	76
Hancock.....	272	Yokohama, Japan.....	15
Lancaster.....	109	Washington, D. C. (Insane).....	61
Constellation.....	a 2, 024	San Juan.....	5
Franklin.....	a 646		
Pensacola.....	a 1, 023	44,216	
Texas.....	171	<i>Prisoners.</i>	
Independence.....	167	Southery.....	234
Philadelphia.....	62	Naval Prison, Portsmouth.....	195
<i>Navy-yards.</i>		Wabash.....	153
Portsmouth, N. H.....	60	Hancock.....	33
Pensacola, Fla.....	56	Lancaster.....	24
Washington, D. C.....	244	Independence.....	172
Norfolk, Va.....	97	Nlpsic.....	33
<i>Naval stations.</i>		Cavite.....	16
Cavite.....	b 359	Total.....	45,076
Guam.....	70		

^a Includes apprentice seamen under instruction.

^b Includes insular force.

The number of aliens continues to decrease under the operation of the regulations prohibiting the enlistment of any but American citizens and natives of insular possessions, and the further proviso requiring naturalization before reenlistment except in the case of honorably discharged men.

Much difficulty has been experienced in recruiting sufficient machinists' mates for the needs of the service. This is due in a large measure no doubt to industrial conditions, as there is a great demand for machinists at good wages throughout the country. Measures contemplated by the bureau to increase the number under instruction for machinists' mates is referred to elsewhere in this report.

Citizenship.

	Native born.	Naturalized.	Aliens declared intentions.	Aliens resident in United States.	Aliens non-resident in United States.	Natives of—				Total.
						Porto Rico.	Guam.	Samoa.	Philippines.	
Petty officers.....	11,958	2,105	127	10	29	6	6	4	88	14,333
Other rates.....	28,133	1,064	125	201	154	38	70	77	881	30,743
Total.....	40,091	3,169	252	211	183	44	76	81	969	45,076
Less prisoners under sentence of dishonorable discharge and not counted in the quota (44,500 men) allowed by law.....										744
Total number in the service June 30, 1910, under the quota.....										44,332

Percentage of citizenship.

Petty officers (14,333):	
Native born.....	83.43
Naturalized.....	14.68
Declared intentions.....	.89
Aliens resident in the United States.....	.07
Aliens nonresident in the United States.....	.21
Natives of colonial possessions.....	.72
Citizens of the United States.....	98.1
Enlisted men other than petty officers (30,743):	
Native-born.....	91.51
Naturalized.....	3.46
Declared intentions.....	.41
Aliens resident in the United States.....	.65
Aliens nonresident in the United States.....	.5
Natives of colonial possessions.....	3.47
Citizens of the United States.....	94.97
Citizenship of the total enlisted force (45,076):	
Native born.....	88.94
Naturalized.....	7.03
Citizens of the United States.....	95.97
Increase or decrease:	
Increase native-born "petty officers" over 1909.....	.63
Increase native-born "other rates" over 1909.....	1.43
Decrease citizenship "petty officers" from 1909.....	.05
Decrease citizenship "other rates" from 1909.....	.03
Increase native-born total force over 1909.....	.54
Increase citizenship total force over 1909.....	.27

Nativity and residence of the enlisted force.

	Born.	Residence.		Born.	Residence.
At sea.....	7	.....	Austria.....	71	2
Alabama.....	399	386	British Columbia.....	4	3
Alaska.....	4	4	British West Indies.....	48	6
Arizona.....	22	19	British East Indies.....	4	4
Arkansas.....	295	226	Belgium.....	25	.....
California.....	882	1,775	Bohemia.....	18	.....
Colorado.....	245	496	Brazil.....	1	.....
Connecticut.....	756	812	Bulgaria.....	2	.....
Delaware.....	157	148	Canada.....	196	39
District of Columbia.....	357	516	Chile.....	3	4
Florida.....	163	163	China.....	266	237
Georgia.....	604	552	Colombia.....	2	.....
Idaho.....	35	45	Costa Rica.....	1	.....
Illinois.....	2,478	2,478	Cape Verde Islands.....	5	.....
Indiana.....	1,891	1,855	Cuba.....	4	1
Iowa.....	872	674	Danish West Indies.....	9	6
Kansas.....	796	566	Denmark.....	130	6
Kentucky.....	815	640	Ecuador.....	1	.....
Louisiana.....	483	504	England.....	257	4
Maine.....	286	227	Finland.....	90	6
Maryland.....	1,107	1,143	France.....	35	2
Massachusetts.....	2,461	2,839	Germany.....	722	8
Michigan.....	1,618	1,373	Greece.....	38	3
Minnesota.....	589	618	Guam.....	23	27
Mississippi.....	246	280	Hawaii.....	47	55
Missouri.....	1,507	1,479	Haiti.....	1	.....
Montana.....	53	49	Holland.....	37	1
Nebraska.....	519	475	Hungary.....	27	1
Nevada.....	15	20	Italy.....	182	13
New Hampshire.....	214	220	Ireland.....	535	13
New Jersey.....	1,524	1,926	Japan.....	238	67
New Mexico.....	30	39	Korea.....	2	1
New York.....	5,635	6,712	Malta.....	.....	1
North Carolina.....	505	348	Mexico.....	6	4
North Dakota.....	65	59	Newfoundland.....	26	1
Ohio.....	2,570	2,591	Nova Scotia.....	37	3
Oklahoma.....	126	485	New South Wales.....	2	.....
Oregon.....	108	126	New Brunswick.....	14	1
Pennsylvania.....	4,285	4,403	New Zealand.....	3	1
Rhode Island.....	495	761	Norway.....	222	14
South Carolina.....	294	246	Panama.....	1	2
South Dakota.....	137	119	Persia.....	1	.....
Tennessee.....	797	757	Peru.....	2	.....
Texas.....	1,088	1,222	Philippines.....	986	960
Utah.....	38	45	Prince Edward Island.....	5	1
Vermont.....	90	64	Porto Rico.....	49	53
Virginia.....	913	940	Portugal.....	4	.....
Washington.....	145	474	Roumania.....	7	.....
West Virginia.....	256	214	Russia.....	149	1
Wisconsin.....	922	962	Scotland.....	92	5
Wyoming.....	30	30	Society Island.....	1	.....
No residence.....	.....	188	South African Republic.....	1	1
Total.....	39,929	43,413	Spain.....	6	1
Africa.....	1	.....	Switzerland.....	338	12
Argentina.....	6	.....	Switzerland.....	36	.....
Armenia.....	1	.....	Samoa.....	84	88
Azores.....	3	.....	Turkey.....	13	7
Australia.....	16	2	Wales.....	13	.....
			Total.....	5,147	1,663

Color.

White.....	41,765
Negro.....	1,535
Chinese.....	314
Japanese.....	261
Filipino.....	909
Samoa.....	81
Guam.....	76
Hawaiian.....	25
Indian, United States.....	6
Porto Rico.....	44
Total, including 744 prisoners under sentence dishonorable discharge.....	45,076

Good-conduct medals.

Number of enlisted men who hold—	Men.	Medals.
One medal.....	1,430	1,430
Two medals.....	549	1,098
Three medals.....	297	891
Four medals.....	109	436
Five medals.....	42	210
Six medals.....	24	144
Seven medals.....	2	14
Eight medals.....	1	8
Total.....	2,454	4,231

TRAINING OF ENLISTED PERSONNEL.

APPRENTICE SEAMEN.

The bureau has kept under training during the year, as heretofore, nominally 2,500 apprentice seamen at the three training stations, Newport, R. I., Yerba Buena Island, San Francisco, Cal., and at Norfolk, Va., and no serious difficulty has been experienced in meeting the demands of the fleet for ordinary seamen and coal passers from these stations. Conditions have been such that it has been practicable also to keep apprentice seamen under training for the full period of four months. No important change in the course of training for apprentice seamen has been made, and the former practice of allowing those of exceptionally good physique to choose the engineering branch has been continued with excellent results. Those choosing this branch are rated coal passers after completion of the course of training, and about 70 per cent of all the coal passers supplied to the service have undergone the training. The remaining 30 per cent have been enlisted as such and sent direct to the ships. While it is desirable that all recruits of the seamen and engineering branches should undergo a short preliminary course of training before being drafted to sea, those enlisted as coal passers are older men than the apprentice seamen, and, being familiar with their duties in the fireroom and accustomed to a strict routine, it is not difficult to teach them the purely military features of service life.

The several training stations supplied to the service during the fiscal year ordinary seamen and coal passers as follows:

	Ordinary seamen.	Coal passers.
Newport Training Station.....	2,178	1,123
Norfolk Training Station.....	1,110	695
Yerba Buena Training Station.....	1,068	433

The apprentice seamen remaining under instruction June 30, 1910, were as follows:

Newport.....	1,363
Norfolk.....	468
Yerba Buena.....	591

SEAMEN GUNNERS' CLASS.

The division of the seamen gunners' class into two sections, as described in the last report of the bureau, has proven to be beneficial to the service. While the knowledge of those who take the seamen gunner's course, either at the Washington Navy-Yard or at the Torpedo Station, Newport, does not comprise as many subjects as formerly, the graduates are more expert in the branch they pursue. It is found that the length of the course at each place, six months at Washington and eight months at Newport, is ample. The bureau has continued to detail machinists' mates to the Newport class from time to time, notwithstanding the difficulty of keeping the fleet supplied with machinists' mates, in order that there may always be machinists' mates on board ships carrying torpedoes who are familiar with them and are capable of making repairs to these weapons. The bureau had intended to detail a number of machinists' mates for the course in the seamen gunner's class at the Washington yard, but the scarcity of men in this rating in the naval service has made it impossible to do so. This scarcity of machinists' mates in the service is a matter of serious concern to the bureau and is taken up in another part of this report.

During the past fiscal year 411 men were in attendance at the classes, of which 212 completed the training. On June 30 there remained under instruction 45 at Newport and 85 at Washington.

ELECTRICAL CLASSES.

During the past fiscal year no qualified electricians have been enlisted in the naval service, except continuous service men, all vacancies in the lower ratings of electricians being supplied by the two electrical classes maintained at New York and Mare Island. The courses of instruction in these two classes are in no sense elementary, but arranged with a view of making finished electricians out of men who have had some groundwork in practical electricity, either before entering the service or in the dynamo rooms of naval vessels or in connection with the electrical plants on board ship.

The bureau has no difficulty in meeting the requirements of the service in this branch, and takes just pride in the results obtained in these two classes, which furnish expert men for caring for electrical plants on board ship and wireless stations on shore. The training, in fact, is so good, and electricians in the naval service are considered so valuable, that they find no difficulty in securing remunerative employment on shore, and for this reason there are relatively but few reenlistments in the electrical branch.

During the past fiscal year there were 384 men who completed the course at New York and Mare Island, while on June 30, 204 men remained under instruction.

YEOMAN CLASSES.

The needs of the service for yeomen continue to be supplied through the yeoman classes at Newport and Yerba Buena, where a large number of young men are kept constantly under training, and where they get a good groundwork in all that pertains to naval records and accounting on board ship. While the clerical force on board

naval vessels is not always satisfactory, it is due more to conditions than the lack of good material in the service. In this branch, as well as in some other branches in which men are trained in the naval service, but relatively few reenlist as, being highly trained men, many of whom are expert accountants, stenographers, and typewriters combined, they are able to command higher wages in civil life than they receive in the navy; in fact, an ex-navy man, with an honorable discharge, has no difficulty in finding employment in civil life.

The two classes supplied to the service 242 yeomen during the past fiscal year, and 129 remained under instruction June 30

CLASS FOR MACHINISTS' MATES.

This class has continued in successful operation at Norfolk during the past year, and by this means the service gets some very good men familiar with shop work and service practice, as well as marine boilers and engines. There are four classes annually, beginning January 1, March 1, September 1, and December 1, and the course is about one year. At the present time men to be eligible must be serving on reenlistment, and are preferably sent to the class as early in second enlistment as possible. During the year 33 men completed the course and 37 remained under instruction June 30. This is the full capacity of the class.

In this connection the bureau desires to emphasize the great difficulty which confronts it in keeping the service supplied with machinists' mates. Recent inquiry throughout the country results in little encouragement to believe that the needs of the service can be supplied in future from enlistment of expert machinists, because the demand for them is so great that industrial civil establishments in many localities are unable to keep a sufficient number on hand for their needs, even at advanced wages, and ex-navy machinists are very much sought after.

The department has already lowered the former requirements for the enlistment of machinists' mates by no longer requiring a knowledge of marine boilers, which has resulted in securing a few additional men, who, with comparatively short training, will be efficient machinists' mates on board ship, but the number that may be secured, even under the reduced standard of requirements, will not meet the needs of the service, especially when the department has 21 battle ships in full commission and a squadron of battle ships in first reserve. The only hope, therefore, for keeping the service properly supplied with machinists' mates is to train more men in the service. The school at Norfolk is capable of but little more expansion, but the bureau has under consideration the practicability of starting another class either at New York or Charleston, S. C., or at both of these stations.

ARTIFICER CLASS.

This class was designed and established for the purpose of familiarizing newly enlisted men, having trades, with service methods, and the handling of service mechanism. Men from general service are also frequently ordered to this class as a means of keeping up the demand for artificers in the various branches of the service. This has proven to be a successful technical school.

During the year ending June 30, 1910, this class supplied 109 artificers to the service and 21 remained under instruction on that date.

MUSICIANS' CLASSES.

The two musicians' classes, one at Newport and one at Norfolk, continue to furnish musicians to the naval service, the greater number during the past year having been trained at Norfolk. While the bureau has been able, as a rule, to supply the demands of the service from these two schools, those playing different instruments which should constitute a naval band were not properly proportioned, and resulted in inferior bands on board ship. It was deemed advisable, therefore, to try to turn out bands of 16 pieces intact, and for this reason most of the musicians have been sent for training to the class at Norfolk, only a sufficient number being sent to the class at Newport to insure musicians at the station for the proper training of apprentice seamen. It is believed that this plan will result in better bands for the naval service, but it is quite hopeless to expect to retain efficient bandmen in the service at their present rates of pay. These two classes were made necessary by the fact that competent bandmen will not enlist for the wages offered, and many of those who are trained leave the naval service because there is but little opportunity for advancement, and the pay they receive is no inducement to remain.

The two classes during the past year turned out 111 musicians for the service, and on June 30, 14 remained under instruction.

CLASSES FOR COMMISSARY STEWARDS, COOKS, AND BAKERS.

The two classes for commissary stewards, cooks, and bakers, one at the training station, Newport, and the other at the training station, San Francisco, each under the immediate supervision of a pay officer, following a well-regulated system of instruction, has resulted in vast benefit to the service; in fact, it is thought that no technical schools for enlisted men under the bureau have resulted in more benefit, as the training has resulted in supplying efficient commissary stewards, cooks, and bakers to vessels of the fleet, with a consequent improvement in the commissary department throughout the service and uniformity in the preparation of food.

As an example of the results obtained, the bureau invites attention to the success of two exhibits made by the school at the naval training station, San Francisco, at the Master Bakers' Association of that city March 21, 1910: The first exhibit was a large cake model of the cruiser *California*, the base of which was fruit cake excellently baked by the baking class; the superstructure, masts, spars, and decorations were made of sugar. This exhibit was awarded a special gold medal. The second exhibit was a crown roast of mutton and saddle of mutton, prepared in the butcher shop of the station. This exhibit was awarded a bronze medal. On April 30, 1910, in a competitive exhibition of raisin bread baked by professional bakers in San Francisco, a silver cup was awarded the baking class by the San Francisco Call for the best loaf of raisin bread.

From September 17 to 24 of this year there is to be a domestic science exposition at Madison Square Garden, New York, to which

the bureau has been requested to contribute, and has arranged for an exhibit from the class at Newport.

During the year the Newport class furnished 157 men to the service and the class at San Francisco 50. There remained under instruction in both classes on June 30, 141 men.

DISCHARGES, RETIREMENTS, AND DEATHS.

Number of men discharged—	
With honorable discharge, expiration of enlistment.....	5,529
With ordinary discharge, expiration of enlistment.....	773
With ordinary discharge, expiration of enlistment, not recommended for reenlistment.....	128
With dishonorable discharge.....	1,188
With bad-conduct discharge.....	1,547
For physical disability.....	1,013
For unfitness.....	9
For inaptitude.....	119
As undesirable.....	342
By Secretary's order.....	25
By purchase.....	503
Enlistment canceled.....	18
Total discharges.....	11,194
Number of men who applied for retirement during year ended June 30, 1910..	31
Number of men died.....	224
Grand total.....	11,449

Discharges, retirements, and deaths, by ratings.

	Honorable discharge.	Ordinary discharge recommended for reenlistment.	Ordinary discharge not recommended for reenlistment.	Unfitness.	Inaptitude.	Undesirable.	Bad conduct.	Dishonorable.	Physical disability.	By purchase.	Secretary's order.	Canceled.	Total.	Retired.	Died.
SEAMAN BRANCH.															
Mates.....															1
Chief master at arms.....	53	3				1							57	1	2
Master at arms:															
First class.....	36					2			2				40	2	1
Second class.....	28	2				1			1				32		
Third class.....	29	2				2	1		2	3			39		2
Chief boatswain's mate.....	52	7							2				61	3	1
Boatswain's mates:															
First class.....	72	2							2				76		
Second class.....	84	3					4		1				92		5
Coxswains.....	294	12			1	5			10	1			323		4
Chief gunner's mate.....	63	12											75	2	1
Gunner's mates:															
First class.....	76	2							3				81	2	
Second class.....	88	1					1		2				92		3
Third class.....	150	9	1		2	2	1	3	3	1			169	1	3
Chief turret captains.....	18	4											22		1
Turret captains, first class.....	24												24		
Chief quartermaster.....	48	5											53	1	
Quartermaster:															
First class.....	33	2					1		1	1			38	1	
Second class.....	31	2						1					34		
Third class.....	81	5			1	1		4					92		1
Seamen.....	1,272	164	23		16	167	67	72	79	2			1,802		24
Ordinary seamen.....	113	61	25		3	68	427	317	183	117	7		1,321		40
Apprentice seamen.....	4	3	4		9	61	68	157	275	6	2	8	597		23

Discharges, retirements, and deaths, by ratings—Continued.

	Honorable discharge.	Ordinary discharge recommended for reenlistment.	Ordinary discharge not recommended for reenlistment.	Unfitness.	Inaptitude.	Undesirable.	Bad conduct.	Dishonorable.	Physical disability.	By purchase.	Secretary's order.	Canceled.	Total.	Retired.	Died.
ARTIFICER BRANCH.															
Chief electrician	58	1							1	1			56	1	1
Electricians:															
First class	126	1					1		3	1	1		133		3
Second class	74	1			1		5		6	4	1		92		1
Third class	53	4			3	1	4	2	8	17	1		93		1
Chief carpenter's mate	24	5							1				30	1	
Carpenter's mates:															
First class	26		2						1	1			27		1
Second class	19								1	1			23		
Third class	11						2		5	2			20		
Shipwrights:	5		1			1			3	5	4		24		
Ship fitters:															
First class	22						1		1				24		
Second class	5	1					3			1			10		
Blacksmiths:	28	2					4		1	2	1		38		2
Plumbers and fitters:	24	5		1			5	1		3			39		1
Sailmaker's mates:	22	2	1				2						27		
Printers:	11	1								3			15		
Painters:															
First class	10	1					1		1	1			14		1
Second class	8	1					6		1				16		
Third class	6	1				1	6		7				21		1
Landsmen for electrician:						9			3	3		1	16		
<i>Engine-room force.</i>															
Chief machinist's mates:	134	16	1		1				8		2		162	5	2
Machinist's mates:															
First class	70	7	2			2	7		4	10			102		3
Second class	30	2			3	4	14	2	7	15	1	1	79		1
Chief water tenders:	61						1		1				63		2
Water tenders:	230	24					24		2	1			271	2	5
Boiler maker:	34	1					3	1	2	1			42		2
Coppersmiths:	15	2					1						18		
Oilers:	316	31	2			4	16	1	9	5			384	1	7
Firemen:															
First class	439	73	16			9	91	41	29	16			714		11
Second class	109	60	18		1	16	158	125	68	61			676		12
Coal passers:	24	18	10		1	47	344	338	139	59	2	5	987		25
SPECIAL BRANCH.															
Hospital steward:	77	2				1	3		5	2		1	91		
Hospital apprentices:															
First class	70	3				13	2	3	10	8	1		110		1
Hospital apprentices:	3			8	3	28	13	15	32	12	2		116		1
Chief yeoman:	82	4	1			2			2				91	3	5
Yeoman:															
First class	38	6					1			2			47		
Second class	39	5	1			2	4		5	4			61		1
Third class	31	4			1	1	4		3	14			58		
Buglers:	25	9				3	8	5	1	3			54	1	
Bandmaster:	8												8		1
First musician:	13								1				15		
Musicians:															
First class	36	2				1	5	3	2	6			55		1
Second class	18	4			8	1	10	9	12	7			69		2
Landsmen for yeomen:						67	5	9	40	8	6		135		2
COMMISSARY BRANCH.															
Chief commissary steward:	17	2				1			1	1			22		
Commissary steward:	8	1							1				10		
Ship's cooks:															
First class	33	2				1	1		1	1			39		1
Second class	41	1				1	4	2	1	1			51		1
Third class	19	3				2	5	1	5	1			36		1
Fourth class	15	5			4	2	17	18	6	5			72		3
Bakers:															
First class	17						3		1	1			22		
Second class	14	1	2				5	1	6	3		1	33		

Discharges, retirements, and deaths, by ratings—Continued.

	Honorable discharge.	Ordinary discharge recommended for reenlistment.	Ordinary discharge not recommended for reenlistment.	Unfitness.	Inaptitude.	Undesirable.	Bad conduct.	Dishonorable.	Physical disability.	By purchase.	Secretary's order.	Canceled.	Total.	Retired.	Died.
MESSEMAN BRANCH.															
Steward to commander in chief.....	10								2	1			13	1	
Cook to commander in chief.....	7												7	1	
Cabin steward.....	23	2			1								26		1
Cabin cook.....	21	4											25	1	2
Wardroom steward.....	17	2							3				22		1
Wardroom cook.....	16	2				2	1		3				24		1
Steerage steward.....	11	8					1	1					21		
Steerage cook.....	6	11					2						19		
Warrant officers' steward.....	15					2			1				18		1
Warrant officers' cook.....	8	2					2		1				13		1
Mess attendants:															
First class.....	48	4	1				4			1			58		
Second class.....	44	5	1			5	6	4	3	1			69		
Third class.....	11	118	16	1	2	29	57	27	22	2	2	1	288		4
Total, all branches.....	5,529	773	128	9	119	842	1,547	1,188	1,013	503	25	18	11,194	31	224

RETIRED LIST—ENLISTED MEN.

There were 33 men retired during the past fiscal year and 16 deaths, making the total number on the retired list, June 30, 1910, 294, as follows:

Mate.....	1	Masters at arms, second class.....	2
Chief masters at arms.....	31	Boatswains' mates, second class.....	8
Chief boatswains' mates.....	33	Gunners' mates, second class.....	4
Chief gunners' mates.....	12	Machinist's mate, second class.....	1
Chief quartermasters.....	12	Printer.....	1
Chief machinists' mates.....	23	Oilers.....	5
Chief electrician.....	1	Ship's cook, second class.....	1
Chief carpenters' mates.....	6	Coxswains.....	6
Chief water tender.....	1	Gunner's mate, third class.....	1
Chief commissary stewards.....	3	Quartermasters, third class.....	3
Chief yeomen.....	25	Coxswains to commanders in chief..	2
Hospital steward.....	1	Hospital apprentices, first class.....	2
Bandmasters.....	5	Seamen.....	8
Masters at arms, first class.....	5	Firemen, first class.....	11
Boatswains' mates, first class.....	11	Musicians, first class.....	5
Gunners' mates, first class.....	5	Bugler.....	1
Quartermasters, first class.....	5	Steward to commander in chief.....	1
Boilermaker.....	1	Cook to commander in chief.....	1
Machinists' mates, first class.....	8	Stewards to commandants.....	4
Sailmakers' mates.....	4	Cook to commandant.....	1
Carpenter's mate, first class.....	1	Cabin cooks.....	2
Water tenders.....	9	Wardroom stewards.....	2
Painter, first class.....	1	Wardroom cooks.....	2
First musicians.....	3		
Ships' cooks, first class.....	13	Total.....	294

Died during year.

Chief masters at arms.....	2	Gunners' mates, second class.....	2
Chief boatswains' mates.....	2	Oiler.....	1
Chief gunner's mate.....	1	Coxswains.....	2
Chief quartermaster.....	1	Gunner's mate, third class.....	1
Chief carpenter's mate.....	1		
Boatswains' mates, first class.....	2	Total.....	16
Quartermaster, first class.....	1		

RECRUITING.

The work of the recruiting service during the year was very gratifying. The bureau was enabled to continue to maintain the high standard for enlistments, and yet obtain all the recruits required. Three times during the fiscal year—once in January and again in May and June—the authorized strength of 44,500 men was reached, and activity in obtaining new men was partially suspended. The percentage of desertions has continued to decrease.

The number of men in the service increased during the fiscal year from 44,129 to 45,076, a net gain of 947.

The requirements of the age certificate clause in the "Recruiting" appropriation operated as a serious handicap, particularly in the New England district, where the certificates seem to be more difficult to obtain than in other parts of the country. In many instances young men well adapted for the navy were, by reason of that fact, debarred from enlistment. With the modifications of this clause during the coming year, it is believed that this hardship and handicap will be removed, without in any degree lessening the responsibility of recruiting officers in regard to the enlistment of minors.

Steps have been taken to improve the efficiency of the recruiting service and to establish a uniform system for all stations. Petty officers detailed for this duty are selected because of their special fitness, the requirements being excellent habits and bearing and an absorbing interest in the naval service. They must have completed at least one enlistment and have two years or more to serve. To such men the bureau gives a reasonable assurance of two years' service at a recruiting station, if they meet the requirements. It is believed that in the main both officers and men are zealous and conscientious in the performance of their duties and appreciate the responsibilities resting upon them. A monthly efficiency report is received for each man on recruiting duty.

The bureau, on March 25, adopted a table of minimum measurements for the enlistment of Filipinos for the insular force, it having been found by experience that the standard measurements could not be applied. The table adopted is as follows:

Age.	Height.	Weight.	Mean chest measurement.	Expansion.
	<i>Inches.</i>	<i>Pounds.</i>	<i>Inches.</i>	<i>Inches.</i>
18 and 19.....	61	105	30½	2
20 and 21.....	62	108	31	2½
22 and older.....	62½	110	31½	2½

During the year the circular-letter system has been expanded to cover the entire country. Headquarters were established for the Eastern States at 130 Manhattan street, New York (moved July 1, 1910, to 24 East Twenty-third street), where a publicity office is maintained, with full equipment for handling a large mailing list. The capacity of this office is over 15,000 letters a day. Similar headquarters have been established at the Indianapolis recruiting office to cover the Middle States, with about 290,000 names on the index cards and a daily mailing capacity of 8,000 letters; and at Cedar Rapids, Iowa, to cover the Western States, with an average daily capacity of 8,000 letters.

The Oklahoma recruiting district was discontinued as a separate station in August and the Pittsburg district at the end of February, while the Denver district was wholly discontinued in February.

A new recruiting station, with headquarters in Cedar Rapids, Iowa, was established early in March, with substations at Dubuque, Ottumwa, and Mason City. This territory has not been covered regularly by any recruiting station for nearly two years; and in choosing a location for the circular-letter headquarters for the Western States it was thought best to establish the office at this new station.

Numerous changes have been made among the substations. These offices are shifted from time to time to meet local conditions, in order to cover all the territory as efficiently and economically as possible. The policy has been adopted of giving applicants a preliminary examination at the substations and of sending them to the main station for final examination and enlistment. The recruiting officers visit substations only when necessary. This policy has been found to work very well, and it is believed to be more economical, besides permitting the recruiting and medical officers to spend a greater portion of their time at headquarters.

The same general methods have been followed for advertising as were used in the previous year, the only important change being the extension of the circular-letter system. The principal advertising features have been:

The use of want columns of the larger daily papers; display space in selected magazines; illustrated booklets; and post-office hangers. Regarding the latter, the bureau has negotiated for a sketch by a well-known poster artist, from which a hanger will be manufactured and distributed early in the new fiscal year.

Modern business methods are followed in conducting the advertising as nearly as they are adaptable to the recruiting service. Every medium is carefully keyed and the value of each advertising feature, as well as the particular publication, for recruiting purposes, is ascertained with as much accuracy as it is possible to arrive at in the advertising field. Not only is every mail inquiry keyed, in order to trace it to its advertising source, but each applicant is interrogated at the recruiting office regarding the influences which induced him to apply for enlistment. The answers from the different recruiting stations are tabulated at intervals, and after checking them up with the mail returns, the advertising is placed accordingly.

Orders for advertising are issued as a rule, monthly, so that the bureau is not bound to the use of any medium which does not prove profitable.

Great difficulty has been experienced in keeping the complement filled in the ratings of machinists' mates, bandsmen, and cooks and stewards. The shortage in the first of these ratings is believed to be due to the industrial conditions in civil life, particularly in the automobile industry, where high wages are paid to mechanics.

To partially meet this condition the requirements for first enlistment of machinists' mates have been modified so as to permit the enlistment of men who are machinists by trade, but who are lacking in the knowledge of marine engines and boilers. The other steps taken are explained elsewhere in this report.

While the percentage of reenlistments is not discouraging, the bureau believes that the proportion of continuous service men in the navy will not be what is desired until the present retirement and pension laws are modified.

<i>Enlistments.</i>	
Applicants for enlistment.....	76, 074
Applicants rejected for physical disability.....	33, 072
Applicants rejected for other causes.....	25, 136
Total rejected.....	58, 208
Applicants accepted who failed to enlist.....	3, 516
Total rejected or failed to enlist.....	61, 724
Applicants physically qualified and enlisted.....	14, 350
Applicants' disqualifications waived and enlisted.....	406
Total enlisted.....	14, 756
Men enlisted for first enlistment.....	10, 915

Comparative statement of reenlistments.

	1909.	1910.	Increase.	Decrease.
Men entitled to reenlist under discharge.....	6, 203	6, 302	199	.....
Total men reenlisted.....	4, 030	3, 841	.....	189
Total men enlisted.....	18, 713	14, 756	.....	3, 957
Men reenlisted within four months from date of honorable discharge under continuous service.....	1, 201	1, 247	46	.....
Men reenlisted within four months from date of honorable discharge.....	1, 796	1, 765	.....	31
Men reenlisted within four months from date of ordinary discharge under continuous service.....	34	55	21	.....
Men reenlisted within four months from date of ordinary discharge.....	167	137	.....	30
Men reenlisted over four months from date of discharge.....	832	637	.....	195
Total reenlisted year ending June 30, 1910.....		3, 841		
Percentage of men entitled to reenlist who reenlisted.....	65	61	.....	4
Men enlisted during year ending June 30, 1910, to serve during minority.....	2, 200	2, 327	127	.....
Men serving under continuous-service certificate.....	8, 058	9, 848	1, 790	.....
Men holding certificates of graduation.....	865	1, 007	142	.....
Enlisted men serving during minority.....	4, 787	5, 745	958	.....
Men serving June 30, 1910:				
Under first enlistment.....	34, 066	33, 526	.....	540
Under second enlistment.....	6, 483	7, 327	844	.....
Under third enlistment.....	1, 749	2, 063	314	.....
Under fourth enlistment.....	748	914	166	.....
Under fifth enlistment.....	453	516	63	.....
Under sixth enlistment.....	286	319	33	.....
Under seventh enlistment.....	197	299	102	.....
Under eighth enlistment.....	113	134	21	.....
Under ninth enlistment.....	54	68	14	.....
Total in service, including prisoners.....	44, 129	45, 076	1, 487	540
Decrease.....			540	
Net increase.....			947	
Total number of men serving under reenlistment June 30, 1910.....		11, 550		

Table showing number of applications, rejections, and enlistments at recruiting stations, arranged by States, cities, and towns.

State, city, or town.	Applicants for enlistment.	Applicants rejected.		Applicants rejected whose disqualifications were waived.	Applicants accepted who failed to enlist.	Applicants enlisted.
		Physical defects.	Other causes.			
Alabama:						
Birmingham.....	654	334	202	5	10	113
California:						
Los Angeles.....	1,402	299	838		16	240
San Diego.....	70	10	43			19
San Francisco (Pensacola).....	1,167	344	417	1	37	370
Mar Island (Independence).....	402	102	24	2	11	267
Santa Barbara.....	70	21	38			11
Colorado:						
Denver.....	1,094	740	155	7	67	139
Pueblo.....	109	60	34		5	10
Connecticut:						
Hartford.....	983	310	427	1	76	171
District of Columbia:						
Washington City.....	418	226	4	26	6	208
Delaware:						
Wilmington.....	96	72	16		3	5
Florida:						
Key West.....	15	5	1			9
Pensacola.....	60	43			1	16
Georgia:						
Atlanta.....	570	356	83	1	50	73
Illinois:						
Chicago.....	2,266	638	912	31	8	730
Chicago (Wolverine).....	36	17	10		2	7
Rockford.....	22	11	7			4
Indiana:						
Evansville.....	333	123	98		51	61
Fort Wayne.....	299	140	63		39	57
Indianapolis.....	791	362	123	4	52	258
South Bend.....	233	109	47		29	43
Terre Haute.....	389	146	65	2	47	133
Vincennes.....	157	51	47		30	29
Iowa:						
Cedar Rapids.....	64	44	6		4	10
Dubuque.....	24	12	3			9
Mason City.....	30	18	4		1	7
Osceola.....	10				10	
Ottumwa.....	44	23	9		2	10
Sioux City.....	165	95	33		18	19
Kansas:						
Wichita.....	48	30	1		4	4
Kentucky:						
Lexington.....	25	19			3	3
Louisville.....	295	142	36		33	84
Louisiana:						
New Orleans.....	1,792	832	512	23	128	343
Maryland:						
Baltimore.....	1,978	864	837	9	6	280
Massachusetts:						
Boston.....	7,269	2,766	3,914	43	203	429
Boston (Wabash).....	245	39	1	18	1	222
Worcester.....	217	112	64		22	19
Maine:						
Portland.....	121	56	37	2	23	7
Michigan:						
Cadillac.....	22	5	8			9
Cheboygan.....	6	2	2			2
Detroit.....	1,241	637	370	32	61	205
Flint.....	10	4	4			2
Grand Rapids.....	622	335	167	2	66	56
Kalamazoo.....	130	74	37		12	7
Lansing.....	11	3	2		1	5
Ludington.....	10	5	4			1
Muskegon.....	5	3				2
Port Huron.....	10	3	5			2
Saginaw.....	308	128	97		47	36
St. Joseph.....	14	12				2
Minnesota:						
Duluth.....	163	73	61		8	21
Minneapolis.....	1,336	605	417	8	65	257
Missouri:						
Kansas City.....	1,156	750	93	5	21	297
St. Louis.....	2,688	1,780	131	13	283	507

Table showing number of applications, rejections, and enlistments at recruiting stations, arranged by States, cities, and towns—Continued.

State, city, or town.	Applicants for enlistment.	Applicants rejected.		Applicants rejected whose disqualifications were waived.	Applicants accepted who failed to enlist.	Applicants enlisted.
		Physical defects.	Other causes.			
Nebraska:						
Hastings.....	29	14	6		3	6
Lincoln.....	376	197	71		52	56
Omaha.....	1,018	469	329	1	13	208
New Hampshire:						
Portsmouth.....	100	45	1		7	47
New York:						
Binghamton.....	87	36	22	1	9	21
Buffalo.....	1,641	463	993	13	26	172
Buffalo (Wolverine).....	21	10	7		2	2
Dunkirk.....	13	3	6			4
Elmira.....	91	45	25		2	19
Jamestown.....	19	7	5		1	6
New York (80 South street).....	5,921	3,259	1,272	17	361	1,046
New York (126 West street).....	5,932	3,483	1,377	2	209	805
New York (Hancock).....	4,901	1,503	2,559	6	29	816
Rochester.....	870	267	499	1	18	87
Syracuse.....	926	94	717		7	108
Ohio:						
Athens.....	38	26	3		3	6
Bryan.....	5	2	1			2
Cincinnati.....	510	428	15	16	84	299
Cleveland.....	1,050	501	60	11	192	308
Columbus.....	98	46	11	4	7	38
Dayton.....	253	120	15	1	59	60
Hamilton.....	11	6	1			4
Lorain.....	22	20				2
Middletown.....	12	3	4		3	2
Tiffin.....	5	4	1			
Toledo.....	407	201	102		38	66
Toledo (Wolverine).....	14	5	7			2
Youngstown.....	21	10	6			5
Zanesville.....	22	10	4			8
Oklahoma:						
Enid.....	13	12	1			
Oklahoma City.....	750	505	78	4	25	146
Pennsylvania:						
Dubois.....	9	2	6			1
Clearfield.....	11	2	6			3
Erie (Wolverine).....	124	58	18		12	36
Greensburg.....	47	38	7			2
Johnstown.....	139	105	19			15
Meadville.....	13	6	7			
New Castle.....	22	9	9			4
Oil City.....	12	4	7			1
Philadelphia.....	5,830	1,593	3,463	19	174	639
Philadelphia (Lancaster).....	259	4	6	18	1	221
Pittsburg.....	615	346	116	2	26	129
Reading.....	41	29	9			3
Seranton.....	90	48	22	2	3	19
Sharon.....	5	2	3			
Sunbury.....	58	33	8			17
Wilkes-Barre.....	109	57	30		5	17
Williamsport.....	21	13	4			4
Rhode Island:						
Newport—						
Constellation.....	300	27		2	2	363
Torpedo Station.....	34					34
Providence.....	2,288	1,025	974		128	161
South Carolina:						
Charleston (Texas).....	432	58	277		1	96
South Dakota:						
Aberdeen.....	22	10	6			6
Sioux Falls.....	157	91	25		31	10
Tennessee:						
Chattanooga.....	557	392	59	10	30	86
Knoxville.....	408	253	51		51	53
Memphis.....	453	314	64	3	10	68
Nashville.....	364	171	113	8	16	72
Texas:						
Dallas.....	1,004	600	22	6	111	277
Fort Worth.....	845	518	153		46	128
Houston.....	624	269	258		19	78
San Antonio.....	479	284	89	1	23	84

Table showing number of applications, rejections, and enlistments at recruiting stations, arranged by States, cities, and towns—Continued.

State, city, or town.	Applicants for enlistment.	Applicants rejected.		Applicants rejected whose disqualifications were waived.	Applicants accepted who failed to enlist.	Applicants enlisted.
		Physical defects.	Other causes.			
Virginia:						
Norfolk (Franklin).....	644	198	194	3	1	254
Washington:						
Puget Sound (Philadelphia).....	463	216	2	5	22	228
West Virginia:						
Wheeling.....	161	122	24			15
Wisconsin:						
Eau Claire.....	5	4				1
La Crosse.....	31	16	9			6
Madison.....	14	4	7			3
Milwaukee.....	720	181	307	5	1	236
Wyoming:						
Cheyenne.....	25	16	2		4	3
Total, stations.....	74,716	32,956	25,081	396	3,498	13,577

Table showing number of applications, rejections, and enlistments on board ships and at naval stations.

Name of vessel.	Applicants for enlistment.	Applicants rejected.		Applicants rejected whose disqualifications were waived.	Applicants accepted who failed to enlist.	Applicants enlisted.
		Physical defects.	Other causes.			
Alabama.....	1					1
Albany.....	12					12
Albatross.....	4					4
Alliance.....	8					8
Annapolis.....	7					7
Bailey.....	1					1
Bainbridge.....	1					1
Birmingham.....	1					1
Buffalo.....	10	1	1			8
California.....	16					16
Callao.....	6					6
Celtic.....	1					1
Charleston.....	17	2			2	13
Chattanooga.....	3					3
Chester.....	3					3
Chauncey.....	3					3
Cleveland.....	4					4
Colorado.....	9					9
Connecticut.....	26	1				25
Culgoa.....	1					1
Davis.....	2					2
Decatur.....	1					1
Denver.....	2					2
Des Moines.....	1					1
Dixie.....	6	1				5
Dolphin.....	10					10
Dubuque.....	6					6
Fish Hawk.....	11					11
Fortune.....	1					1
Galveston.....	2					2
Georgia.....	9					9
Grampus.....	1					1
Hartford and Severn.....	153					153
Helena.....	20					20
Hopkins.....	2	1				1
Idaho.....	6					6
Indiana.....	10					10
Iris.....	4					4
Iroquois.....	33	21	3		2	7
Kansas.....	11					11
Kearsarge.....	5	1		1		5

Table showing number of applications, rejections, and enlistments on board ships and at naval stations—Continued.

Name of vessel.	Applicants for enlistment.	Applicants rejected.		Applicants rejected whose disqualifications were waived.	Applicants accepted who failed to enlist.	Applicants enlisted.
		Physical defects.	Other causes.			
Kentucky.....	1					1
Louisiana.....	30	1		1	1	29
Marietta.....	1					1
Maryland.....	23	7	1	1		16
Mayflower.....	9					9
Milwaukee.....	26	6	1		1	18
Minnesota.....	7					7
Mississippi.....	8					8
Missouri.....	5					5
Mohican.....	73	11	27			35
Montana.....	2					2
Monterey.....	5					5
Montgomery.....	4					4
Nebraska.....	6	1		1		6
Newark.....	4					4
New Hampshire.....	2					2
New Jersey.....	11					11
New York.....	4					4
North Carolina.....	2					2
North Dakota.....	1					1
Ohio.....	1					1
Panther.....	8	3				5
Paragua.....	1					1
Paul Jones.....	4					4
Pennsylvania.....	18	1				17
Peoria.....	7	2				5
Perry.....	4					4
Pike.....	1					1
Plunger.....	1					1
Prairie.....	7					7
Princeton.....	1					1
Rainbow.....	16					16
Raid.....	1					1
Rhode Island.....	48	2	2			48
Rowan.....	1					1
Salem.....	1	1	1			1
Scorpion.....	4					4
Smith.....	1					1
South Dakota.....	13			1		12
Southern.....	23					23
Stewart.....	1					1
St. Louis.....	16					16
Stockton.....	1					1
Supply.....	6	2	2			2
Sylph.....	2	1		1		2
Tacoma.....	1					1
Tennessee.....	16					16
Thornton.....	2					2
Tingey.....	1					1
Truxtun.....	3					3
Vermont.....	9					9
Vicksburg.....	1					1
Villalobos.....	4					4
Virginia.....	31	2		2		31
Washington.....	17	2	1			14
West Virginia.....	35					35
Whipple.....	2					2
Wilmington.....	19					19
Wisconsin.....	3					3
Yankton.....	1					1
Yorktown.....	2					2
Naval stations at—						
Cavite, P. I.....	270	42	19		9	200
Olongapo, P. I.....	21	1				20
Hawaii.....	2					2
Guam.....	42	2				40
Tutuilā.....	17	1			2	14
Other ships.....	18					18
Total on vessels.....	1,358	116	55	10	18	1,179
Total at stations.....	74,716	32,956	25,081	396	3,498	13,577
Grand total.....	76,074	33,072	25,136	406	3,516	14,756

DESERTIONS.

The bureau is glad to report that there has been a decrease in the percentage of desertions from the service over that of last year. During the year ending June 30, 1910, there were 2,811 desertions while for the year ending June 30, 1909, there were 3,184, notwithstanding that on June 30, 1910, there were 947 more men in the service than on June 30, 1909. This gratifying decrease is a hopeful sign on the face of it, but apt to be misleading.

During recent years the discomforts on board ship have decreased, while the frequency of shore leaves to enlisted men has continued to increase, and the quality of food so improved that it is believed that no class of workmen live so well as the enlisted force of the navy; and to these causes may be attributed entirely the decrease in desertions. No very material decrease can be expected until different measures are adopted to prevent it, and a different policy in regard to treatment of deserters is inaugurated.

While absence without leave and desertion are the worst evils from which the naval service suffers, there is no problem in naval discipline so difficult of solution as that of how to reduce it to a minimum, or the treatment of those guilty of these offenses. Of course, there will always be some desertions, but the surest way to reduce them to a minimum is to make the apprehension of offenders certain and the punishment sure, swift, and severe. If to this were added a strong public sentiment against deserters it would soon almost eliminate the evil. Unfortunately, however, many of our people do not consider desertion a serious military offense, but regard it more in the nature of a breach of contract only, and that ostracism which attaches to a person guilty of civil crimes does not attach to a deserter from the naval or military service. Besides, there is a growing sentiment against severe punishment for military offenses, and the problem of how to stop the evil under these conditions is one that presents serious difficulty. The question is still further complicated by the fact that our enlisted force is recruited principally from young men, the great majority of whom are between 17 and 21 years of age, and, unfortunately, it is from this class that the greatest number desert; many of them desert from homesickness before leaving the training stations, while many others who have successfully combated their homesickness at the training stations find it overpowering when transferred to sea, where they feel the discomforts and restraints inseparable from seafaring life.

Homesickness is a recognized disease, and the bureau feels that young men who absent themselves from their stations without leave through this cause should be saved from the severe penalties of desertion, where it can be done without prejudice to military discipline. To this end the bureau has undertaken to gain the cooperation of parents or guardians of these young men who have been less than one year in the service, who absent themselves without leave, and whose commanding officers report worthy of consideration, in securing their return to the naval authorities at once. Those who will return will not be treated as deserters. The bureau is not, however, oversanguine of any large degree of success in this, nor in any other appeal to parents or to individuals as long as the attitude of some of our people toward desertion remains unchanged.

Other deserters from the naval service are those temporarily dissatisfied for various reasons, and that class known as tramps in civil life, and of which the navy gets a small percentage, who never remain long in any employment. One of the causes of temporary dissatisfaction among our men is felt to be long periods of enforced idleness at navy-yards when they are restricted on board ship for some offense, or have not money enough to go on leave, after long periods of service on the drill grounds or at Guantanamo Bay. It is believed that desertions from this cause would be very much reduced if the fleet cruised more abroad and all men were permitted to see as much of the world as possible. To travel and see the world is an inducement which causes many young men to enter the service, and it is well known that a ship's company is never so contented as when cruising with new and interesting ports to be seen at the end of the cruise.

The bureau feels that every concession not inconsistent with military efficiency should be made to prevent desertions, but believes, on the other hand, every effort should be made to apprehend those who persist in remaining in desertion, and that as a deterrent to others that swift punishment should follow conviction and approval of the sentence by the department. It is recommended, therefore, that in every case where a deserter is sentenced to confinement at hard labor the sentence be literally enforced. It is no reflection upon the present administration of our naval prisons to say that it is believed that the present practice of using ships for naval prisons, in which all classes of offenders are confined, does not meet the requirements of naval discipline. It must be remembered that in punishing deserters and other offenders against military discipline the object sought is not only to inflict an appropriate punishment but to deter others. On board of a ship there can not be that complete isolation to which certain classes of offenders should be subjected. In this connection the bureau deems it highly desirable that there should be sufficient naval prisons on shore to insure the separation of old offenders and those who exert a demoralizing influence upon the young, from youthful offenders and those guilty of less serious offenses.

Desertions fiscal year ending June 30, 1910.

Men absenting themselves from ship or station without authority.....	3, 549
Men voluntarily returning to service.....	505
Men apprehended.....	405
Total surrendered or apprehended.....	910
Total absentees, June 30, 1910.....	2, 639
Apprehended or surrendered, convicted of desertion.....	172
Desertions for fiscal year ending June 30, 1910.....	2, 811
Percentage of desertion based on 58,885, the whole number of enlisted men in the service during the year.....	4. 77
Men who deserted during previous years and voluntarily returned to service or were apprehended during the fiscal year ending June 30, 1910:	
Voluntarily returned.....	255
Apprehended.....	337
Total surrendered or apprehended.....	592
Men convicted of desertion from previous years.....	393

Desertions from vessels and stations for fiscal year ending June 30, 1910; also deliveries and surrenders for that year and for desertions of previous years.

	Year ending June 30, 1910.			Returned to service, desertion of previous years.			
	Absentees during year.	Returned to service.		Absent without authority, June 30, 1910.	Delivered.	Surrendered.	Total.
		Delivered.	Surrendered.				
Alabama.....	2			2	5	3	8
Albany.....	52		7	45	1	3	4
Alert.....		1		4			
Alliance.....	3			3			
Amphitrite.....	1			1			
Arethusa.....	4			4	1		1
Barry.....	5		1	4			
Biddle.....	3			3			
Birmingham.....	47	6	4	37	7	1	8
Blakely.....	1			1			
Buffalo.....	6	1		5	3	5	8
California.....	62	6	8	48	3	6	9
Castine.....	12	1	3	8		1	1
Celtic.....	10	1	5	4	1	1	2
Charleston.....	14	1	2	11	2	2	4
Chattanooga.....	4		1	3	1		1
Chauncey.....	1			1			
Chester.....	34	5	13	16	4	1	5
Cheyenne.....	5	1	2	2	5	1	6
Chicago.....	3		2	1	2	1	3
Choctaw.....	1			1			
Cleveland.....	9	1	2	6			
Colorado.....	98	14	9	75		7	7
Columbia.....					1		1
Concord.....	2			2			
Connecticut.....	39	5	7	27	4	4	8
Constellation.....	218	42	24	147	27	7	34
Culgoa.....	13	1	1	11		2	2
Dale.....	3			3			
Davis.....	2	1		1			
Delaware.....	15	2		13			
Denver.....	5		1	4	1	1	2
Des Moines.....	21	6	5	10	4	1	4
Dixie.....	29	6	7	16		3	3
Dolphin.....	7			7	1		1
Dubuque.....	11	1	6	4	1	1	2
Dupont.....	3	1		2			
Eagle.....	7	1	3	3			
Farragut.....	3			3			
Fish Hawk.....	2			2			
Flusser.....	1			1			
Fortune.....	4			4			
Franklin.....	173	25	12	136	20	10	30
Galveston.....	9	1		8			
Georgia.....	67	11	9	47	5	7	12
Glacier.....	19		1	18	1	2	3
Goldsboro.....	6			6			
Grayling.....	1			1			
Hancock.....	131	18	25	88	7	4	11
Hartford.....	1			1	2		2
Helena.....	1			1			
Hist.....	3		1	2			
Hopkins.....	18		2	16	1		1
Hull.....	12	2		10	1		1
Iaho.....	59	6	10	43	4	2	7
Illinois.....					5	2	6
Independence.....	71	1	1	69	5	9	14
Indiana.....	18	3	5	10	3		3
Iowa.....	7			7	2	2	4
Iris.....	16	3	3	10			
Kansas.....	39	7	6	26	6	1	7
Kearsarge.....	3	2		1	6	1	7
Kentucky.....					3	2	5
Larnson.....	7			7			
Lancaster.....	31	4	3	24	2	3	5
Lawrence.....	8			8		1	1
Louisiana.....	69	14	8	47	8	2	10
Macdonough.....	12	1	2	9			
Maine.....	11	1	4	6	5	4	9
Marblehead.....						1	1

Desertions from vessels and stations for fiscal year ending June 30, 1910; also deliveries and surrenders for that year and for desertions of previous years—Continued.

	Year ending June 30, 1910.			Returned to service, desertion of previous years.			
	Ab-sentees during year.	Returned to service.		Absent without authority, June 30, 1910.	Deliv-ered.	Surren-dered.	Total.
		Deliv-ered.	Surren-dered.				
Marietta.....	16		7	7			
Maryland.....	88	11	6	91	3	1	4
Massachusetts.....	3			3			
Mayflower.....	7	2	2	3		1	1
Michigan.....	26	2	2	23			
Milwaukee.....	16			16	1	3	4
Minnesota.....	53	8	11	34	2	4	6
Mississippi.....	31	3	9	19	5	5	10
Missouri.....	53	12	17	24	7	4	11
Montana.....	80	7	18	55	1	2	3
Montrey.....	4	1		3			
Montgomery.....	23	3	4	16	5	6	11
Navajo.....	4			4			
Nebraska.....	94	13	27	54	8	10	18
Newark.....	10	2	1	7			
New Hampshire.....	51	5	10	36	13	7	20
New Jersey.....	54	6	10	38	4	8	12
New Orleans.....	20	2		18			
New York.....	25	6	10	12	3	2	5
North Carolina.....	62	6	14	42	6	3	9
North Dakota.....	16	2		14			
Ohio.....	19	3	2	14	7	12	19
Olympia.....	7	1	2	4	2	1	3
Ozark.....	2			2			
Paducah.....	10		5	5			
Panther.....	32	6	15	11			
Paragua.....	1			1			
Patapaco.....	2		1	1			
Patuxent.....	7	1	1	5			
Paul Jones.....	9		1	8		1	1
Pawtucket.....	1			1			
Pennsylvania.....	65	2	1	62	4	5	9
Pensacola.....	230	16	11	203	15	10	25
Perry.....	21			21		2	2
Philadelphia.....	33	1	5	27	1	2	3
Potomac.....	1			1	3		3
Prairie.....	13	2	1	10	2	2	4
Preble.....	17	1	1	15			
Preston.....	3		1	2			
Princeton.....	6			6			
Puritan.....	1			1			
Rainbow.....	5	2	1	2	1		1
Reid.....	2	1		1			
Reserve Torpedo Division.....	8			7		1	1
Rhode Island.....	65	12	11	42	14	4	18
Rowan.....	4			4			
Salem.....	36	3	9	24	6	5	11
Samar.....	2		1	1			
Samoset.....	1			1			
Scorpion.....	1			1			
Severn.....	7	1	2	4			
Shark.....	1			1			
Shubrick.....	2			2			
Smith.....	7		3	4			
Solace.....	3			3		1	1
South Carolina.....	9	1		8			
South Dakota.....	95	2	9	84	3	2	5
Southern.....	9	4	1	4			
Stewart.....	6			6	1	1	2
Stingray.....	1			1			
St. Louis.....	64	2	10	52	4	6	10
Supply.....	5		2	3			
Tacoma.....	13		3	10	3	3	6
Tennessee.....	57	5	9	43	6	4	10
Texas.....	2			2	1		1
Thornton.....	3	1	1	1			
Tingey.....	1			1			
Tonopah.....	3		2	1			
Triton.....	1			1			
Truxtun.....	7			7	2		2
Uncas.....	1			1			

Desertions from vessels and stations for fiscal year ending June 30, 1910; also deliveries and surrenders for that year and for desertions of previous years—Continued.

	Year ending 30, 1910.			Returned to service, desertion of previous years.			
	Absentees during year.	Returned to service.		Absent without authority, June 30, 1910.	Delivered.	Surrendered.	Total.
		Delivered.	Surrendered.				
Vermont.....	48	3	9	36	12	7	19
Vicksburg.....	15	1		14			
Villalobos.....	4			4			
Viper.....	1			1			
Virginia.....	53	12	10	31	4	5	9
Wabash.....	44	11	7	26	7	9	16
Washington.....	35	2	2	31	5	2	7
West Virginia.....	60		2	58	7	3	10
Wheeling.....	3			3			
Whipple.....	11		1	10	1		1
Wilkes.....	3	1		2		1	1
Wilmington.....	3	1		2	1		1
Wisconsin.....	18	2	3	13		1	1
Wolverine.....	3	1		2			
Wompatuck.....	1			1			
Worden.....	1			1			
Wyoming.....						1	1
Yankee.....					3		3
Yankton.....	10	4	2	4	2	3	5
Yorktown.....	19	3	1	15			
Torpedo station, R. I.....	5	1		4		1	1
Navy-yards:							
Washington, D. C.....	3	1		2	1		1
Pensacola, Fla.....	1			1			
Craft, Mare Island.....	3			3	1	1	2
Recruiting station, Omaha, Nebr.....	1			1			
Indian Head.....	1		1				
Naval station:							
Hawaii.....	1	1					
Cavite.....	6		1	5			
Naval Hospital, Canacao, P. I.....	1			1			
Total.....	3,549	405	505	2,639	337	255	592

Desertions by ratings showing deliveries and surrenders for year ending June 30, 1910, and of men who deserted during previous years.

	Year ending June 30, 1910.			Returned to service, desertion of previous years.			
	Absentees during year.	Returned to service.		Absent without authority, June 30, 1910.	Delivered.	Surrendered.	Total.
		Delivered.	Surrendered.				
SEAMAN BRANCH.							
Chief master at arms.....	1			1			
Master at arms:							
First class.....	2			2			
Second class.....	2	1	1				
Third class.....	6			6		3	3
Chief boatswain's mate.....	2			2		1	1
Boatswain's mates:							
First class.....	3		1	2			
Second class.....	6		2	4		2	2
Coxswains.....	32	1	8	23		5	5
Chief gunner's mate.....	2		1	1			
Gunner's mates:							
First class.....	1		1				
Second class.....	5		3	2			
Third class.....	10	3		7			
Turret captains, first class.....	1			1		1	1

Desertions by ratings showing deliveries and surrenders for year ending June 30, 1910, and of men who deserted during previous years—Continued.

	Year ending June 30, 1910.			Returned to service, desertion of previous years.			
	Absentees during year.	Returned to service.		Absent without authority June 30, 1910.	Delivered.	Surrendered.	Total.
		Delivered.	Surrendered.				
SEAMAN BRANCH—continued.							
Quartermaster:							
First class.....	1			1			
Second class.....	2		1			2	2
Third class.....	6		3	3	2		2
Seamen.....	266	32	51	183	14	18	32
Ordinary seamen.....	784	110	127	547	113	77	190
Apprentice seamen.....	318	42	24	252	42	18	60
ARTIFICER BRANCH.							
Chief electrician.....	1			1			
Electricians:							
First class.....	4		1	3			
Second class.....	14		3	11			
Third class.....	26	9	2	15	1	1	2
Carpenter's mates:							
First class.....	2			2	1		1
Second class.....	5		1	4			
Third class.....	8			8		1	1
Shipwrights.....	7		3	4		1	1
Ship fitters:							
First class.....	3	1	1	1			
Second class.....	1		1				
Blacksmiths.....	6		6				
Plumbers and fitters.....	8	1	2	5	1	3	4
Printers.....	1			1			
Painters:							
First class.....	1			1			
Second class.....					1		1
Third class.....	10		1	9		1	1
Landsmen for electrician.....	6		1	5			
<i>Engine-room force.</i>							
Chief machinist's mates.....	0		2	4		1	1
Machinist's mates:							
First class.....	21	2	5	14	1	2	3
Second class.....	46	6	3	37		1	1
Chief water tenders.....	2			2			
Water tenders.....	37	4	11	22		1	1
Boiler makers.....	2		2			1	1
Coppersmiths.....	4			4			
Oilers.....	42	5	10	27	1	3	4
Firemen:							
First class.....	164	9	27	128	4	9	13
Second class.....	325	24	41	260	18	24	42
Coal passers.....	937	121	123	693	104	53	157
SPECIAL BRANCH.							
Hospital stewards.....	3		2	1			
Hospital apprentices, first class.....	8	2	2	4		1	1
Hospital apprentices.....	37	5	2	30	2	4	6
Chief yeomen.....	4			4			
Yeoman:							
First class.....	5	2	1	2			
Second class.....	15		2	13		2	2
Third class.....	18	2	5	11		3	3
Buglers.....	21	4	3	14	1		1
First musicians.....	4		1	3			
Musicians:							
First class.....	23			23		1	1
Second class.....	24	2	2	20	1	4	5
Landsmen for yeoman.....	16		1	15		1	1

Desertions by ratings showing deliveries and surrenders for year ending June 30, 1910, and of men who deserted during previous years—Continued.

	Year ending June 30, 1910.				Returned to service, desertion of previous years.		Total.
	Absentees during year.	Returned to service.		Absent without authority June 30, 1910.	Delivered.	Surrendered.	
		Delivered.	Surrendered.				
COMMISSARY BRANCH.							
Chief commissary steward.....	1			1			
Ship's cooks:							
First class.....	5	2	1	2			
Second class.....	4			4	2		2
Third class.....	13		2	11	1	2	3
Fourth class.....	61	6	7	48	5	5	10
Bakers:							
First class.....	7		1	6	1		1
Second class.....	20		1	19	1	1	2
MESS-MEN BRANCH.							
Steward to commander in chief.....	1			1			
Cooks to commander in chief.....	2			2			
Cabin stewards.....	4		1	3			
Cabin cooks.....	2			2			
Wardroom stewards.....	7		1	6			
Wardroom cooks.....	6			6	1		1
Steerage stewards.....	2			2			
Steerage cooks.....	6			6	1		1
Warrant officers' stewards.....	1			1			
Warrant officers' cooks.....	5	1		4			
Mess attendants:							
First class.....	4			4			4
Second class.....	5		2	3			
Third class.....	76	8	5	63	15	1	16
Total, all branches.....	1,996	205	266	2,639	162	121	283

Places of enlistment, by States and cities, of men absent without authority on June 30, 1910.

Alabama:		Georgia:	
Birmingham.....	13	Atlanta.....	6
Arkansas:		Augusta.....	1
Fort Smith.....	2	Brunswick.....	1
Little Rock.....	1	Columbia.....	1
California:		Savannah.....	1
Fresno.....	1	Illinois:	
Long Beach.....	2	Chicago.....	115
Los Angeles.....	84	Danville.....	1
Maro Island.....	47	Springfield.....	1
Redondo.....	1	Indiana:	
Sacramento.....	1	Evansville.....	10
Santa Barbara.....	2	Fort Wayne.....	10
San Diego.....	11	Indianapolis.....	55
San Francisco.....	108	South Bend.....	2
San Pedro.....	1	Terre Haute.....	14
Venice.....	2	Vincennes.....	4
Colorado:		Iowa:	
Colorado Springs.....	1	Burlington.....	1
Denver.....	96	Cedar Rapids.....	8
Pueblo.....	19	Davenport.....	3
Connecticut:		Des Moines.....	2
Hartford.....	9	Sioux City.....	3
Delaware:		Kansas:	
New Castle.....	1	Wichita.....	3
District of Columbia:		Kentucky:	
Washington City.....	21	Louisville.....	5

Places of enlistment, by States and cities, of men absent without authority on June 30, 1910—Continued.

Louisiana:		Oklahoma:	
New Orleans.....	59	Ardmore.....	1
Shreveport.....	1	Enid.....	2
Maryland:		Muskogee.....	1
Annapolis.....	8	Oklahoma City.....	23
Baltimore.....	31	Shawnee.....	2
Massachusetts:		Oregon:	
Boston.....	108	North Bend.....	1
Provincetown.....	11	Pennsylvania:	
Woods Hole.....	1	Chester.....	1
Michigan:		Erie.....	4
Cadillac.....	1	Franklin.....	1
Detroit.....	54	Johnstown.....	5
Grand Rapids.....	14	Oil City.....	2
Jackson.....	2	Philadelphia.....	134
Kalamazoo.....	2	Pittsburg.....	38
Lansing.....	2	Reading.....	2
Saginaw.....	5	Scranton.....	1
Sault Ste. Marie.....	1	Titusville.....	1
Minnesota:		York.....	2
Duluth.....	5	Rhode Island:	
Minneapolis.....	75	Newport.....	22
Mississippi:		South Carolina:	
Jackson.....	1	Charleston.....	5
Missouri:		South Dakota:	
Joplin.....	5	Aberdeen.....	2
Kansas City.....	88	Sioux Falls.....	1
St. Louis.....	151	Texas:	
Nebraska:		Beaumont.....	1
Lincoln.....	10	Dallas.....	117
Omaha.....	67	El Paso.....	1
New Hampshire:		Fort Worth.....	9
Portsmouth.....	5	Houston.....	2
New York:		San Antonio.....	5
Buffalo.....	42	Tennessee:	
Corning.....	1	Chattanooga.....	23
Jamestown.....	1	Memphis.....	8
New York.....	401	Nashville.....	9
Rochester.....	20	Knoxville.....	5
Syracuse.....	18	Virginia:	
Troy.....	1	Norfolk.....	20
Ithaca.....	3	Washington:	
North Carolina:		Blaine.....	1
Newbern.....	1	Puget Sound.....	82
Ohio:		Seattle.....	1
Akron.....	1	Spokane.....	2
Canton.....	1	Tacoma.....	1
Cincinnati.....	46	West Virginia:	
Cleveland.....	47	Wheeling.....	8
Columbus.....	6	Wisconsin:	
Dayton.....	10	Milwaukee.....	39
Hamilton.....	1	Wyoming:	
Marion.....	1	Cheyenne.....	4
Massillon.....	1	Enlisted on vessels.....	52
Toledo.....	19	Total.....	2,639

THE NAVAL HOME.

The bureau renews its recommendation of last year that pensions of inmates of the United States Naval Home be not paid to the Secretary of the Navy for the benefit of the naval pension fund, as is now required by law. Inmates of the Soldiers' Home who are pensioners do not lose their pensions, but such pensions are held intact for their

benefit upon discharge from the home, or a part paid to the pensioner and the remainder held to be paid to him upon discharge, or, under certain conditions prescribed by law, a certain portion may be paid to a deserted wife or a dependent child. The same law should apply to pensions of inmates of the Naval Home. It is recommended that when retired officers and retired enlisted men of the United States Navy or Marine Corps are, in the discretion of the Secretary of the Navy, admitted to such home, they should have deducted from their accounts one-fourth of their current monthly pay, to be paid to the Secretary of the Navy for the benefit of the fund from which the home is supported. It is thought that this would more nearly accomplish the purpose of the home, to provide for disabled and needy officers and men of the United States Navy and Marine Corps. Very few officers would take advantage of such privileges, while a few retired men, drawing either low or comparatively high pay, would no doubt enter the home. These old men, who have no real home ties, will be happier in their declining years if surrounded by those whose lives have been passed in the service. Officers and men who draw high pay and enter the home would be taxed about what it would cost the pension fund to support them, while retired men whose pay will not support them will be made comfortable at no expense to the Government and at but small cost to the pension fund.

The total number of beneficiaries of the home during the year ending June 30, 1910, was 122. On the latter date there remained on the rolls of the home 101. Their ages vary from 33 to 103 years. The person whose age is shown on the books of the home as being 103 years of age claims to be 107.

NAVAL TRAINING STATION, GREAT LAKES.

Work on the naval training station at North Chicago has progressed during the year and the station will probably be in readiness to receive recruits early in the coming spring. It was expected that it would be ready for this purpose about July 1, but unexpected delays in the execution of contracts has made this impossible.

UNITED STATES NAVAL OBSERVATORY.

In general it may be stated that the progress made has been good and the results very satisfactory. The continuance of the operations of the astronomical council during the year has been beneficial and doubtless will improve as the members become accustomed to the consideration of painstaking individual examination of the matters presented.

MUSEUM OF INSTRUMENTS.

It has long been contemplated to assemble as a museum the instruments formerly used but now out of date and replaced by more modern ones. Many of these instruments have been stored or packed away for as long as fifty years. The following instruments are now set up, or soon will be, in the dome room assigned as a museum:

One mural circle—Made by Troughton & Sons, of London, in 1843.

One refraction circle—Made by Ertel & Son, of Munich, in 1846.

One meridian circle—Made by Repsold & Co., of Hamburg, in 1850.

One 5-inch equatorial—Made by A. Clark & Son, of Cambridgeport, Mass., for observing the transit of Venus in 1874.

One heliostat—Made by A. Clark & Son, of Cambridgeport, Mass., for observing the transit of Venus in 1874.

- One heliostat—Made by Wm. Gaertner, of Chicago, for the eclipse of 1905.
 One universal instrument—Made by Ertel & Son, of Munich, in 1846.
 One surveyor's transit—Made by Richard Patten & Son, of Baltimore.
 One dip circle—Made by Kent, of London.
 One stellar compass and great circle course projector—Invented by Captain Lawless.
 One recording inclinometer—Invented by Lieut. W. E. Edge, R. N.
 One patent compass—J. Peiche.
 One compass—Made by Elliott Brothers, of London.
 One magnetometer—Made by Elliott Brothers, of London.
 One electrochronograph and clock—Invented by Prof. John Locke in 1846.

DEPARTMENT OF ASTRONOMICAL OBSERVATIONS.

The 6-inch transit circle.—During the year the division errors down to the degree lines of Circle A have been determined at a high temperature in summer and at a lower temperature in the winter and spring. The results of the two series of measures agree fairly well, the average probable error of the mean of the two determinations of each 5° line being 0''.046 and of the mean of the intermediate degree lines 0''.069. In addition the division errors of the 5° lines of Circle B were determined, and of the 10' lines for 13 scattered arcs of 1° on Circle A, and the 2' lines for 2 arcs of 20' on Circle A. The errors of the 2' lines are periodic in character with a period of 10' and an amplitude of about L''.1.

During the year observations for right ascension and declination have been made on selected lists of standard stars, and also observations of stars have been made by reflection for determining the flexure of the telescope and with screens to determine the personal equations due to star magnitude of the observers. The horizontal flexure is small, probably not more than 0''.1. The vertical of cosine flexure is of about the same magnitude.

In addition to the three lists of stars observed with the 6-inch transit circle during the preceding year there were three additional lists observed during the year ending June 30, 1910. The observations were made in both clamps, and one of the lists, comprising 13 stars, was observed direct and reflected. In addition to the discussion of the observations already made it is proposed to make a further series of test observations before beginning regular work. This series will comprise observations on 30 stars, well scattered in zenith distance, using a reversing prism to eliminate the effects of certain personal errors, observing in both clamps, direct and reflected, and with the eye end and objective end interchanged. It is expected that the series can be secured and the results reduced by the early part of 1911.

The total number of observations of stars made during the year was 2,482, and the reduction of observations is nearly up to date.

The clock vault.—The following clocks have been used as standards during the year: Riefler No. 151 until August 26, Riefler No. 70 from August 26 to March 9, and Riefler No. 151 from March 9 to June 30. There has been considerable trouble due to leakage of air through the cement in the glass cases of the clocks, but this has been checked and the cases are now air-tight. When the regulating devices have worked normally the monthly variations of temperature in these clock cases have usually been less than 0.1° C. The regulating control failed four times during the year, but in no cases causing a variation of more than 0.5° C. in the clock cases.

The division of the 9-inch transit circle.—This instrument has been used through the year for the determination of the right ascensions

and declinations of the sun, moon, planets, clock stars, pole stars, and a few miscellaneous stars. Observations on stars have also been made with screens for determining magnitude corrections in right ascension, with the reversing prism for determining bisection corrections in zenith distance, and by reflection to determine the sine flexure correction in zenith distance. The horizontal flexure was also determined by means of the collimators, and the pivot irregularities have been measured again with the axial microscope. These irregularities are small.

The total number of observations during the year was 5,600.

The new clock vault.—This vault has not been in use as yet and has been without artificial heat. The relative humidity has been high in warm weather.

The division of the equatorials.—Observations were made during the year as follows:

Satellites of Mars.....	61
VI Satellite of Jupiter.....	3
Satellites of Jupiter.....	63
Satellites of Uranus.....	19
Satellites of Neptune.....	36
Diameters of planets.....	24
Occultations of stars by the moon.....	39
Seven asteroids.....	13
Five comets.....	36
Instrumental constants.....	12
Arcs for micrometer screw.....	34
Stars measured for Washington Zone Catalogue.....	87
Stars identified for Washington Zone Catalogue.....	39

Of the above observations, 5 of comets were secured with the 12-inch, as well as 12 observations of 6 asteroids, 23 occultations, 1 arc for the micrometer screw, and 2 determinations of the position of the instrument. Also, 50 stars were measured for the Washington Zone Catalogue, and 20 stars were identified.

A series of observations of Halley's comet was obtained, extending over the period November 9, 1909, to June 7, 1910. The remaining part of June, 1910, was cloudy, and in July observations on the comet had to be given up on account of the accumulation of other work. For two weeks, at the time the comet was nearest the earth, it was necessary to give up entirely both the 26-inch and 12-inch equatorial, to the use of visitors. The pressure for admittance to the observatory became so great that three 5-inch equatorials were mounted at the Capitol, and two assistants were sent there from the observatory to handle them. Also, two small equatorials were placed on the roof outside the 12-inch dome, and two assistants were detailed to them to show visitors.

It should be noted that the Halley comet committee of the Astronomical and Astrophysical Society of America, through its secretary, Prof. George C. Comstock, by letter of November 1, 1908, requested this observatory to send a photographic expedition to the Hawaiian Islands to occupy this important station as long as photographs could be secured. This request was not approved by the department, as such an expedition was deemed to be outside the proper scope of the work of the observatory.

Included in the occultations are those observed during the total eclipse of the moon on November 26, 8 on the 12-inch equatorial and 10 on the 26-inch.

Various observations made with the equatorials have been published in the *Astronomical Journal*, including observations of comets, asteroids, Satellite VI of Jupiter, and occultations.

Photographs of the sun were taken at apparent noon on 158 days. Solar spots were found on 147 days. While showing decreased sun-spot activity, compared with the conditions for several years past, the diminution does not correspond to the average condition at this period of the sun-spot cycle.

Volume VI of the Observatory Publications, second series, is now going through the press. In it are included the equatorial observations for the years 1893-1907.

On Thursday evening of each week visitors have been shown through the 12-inch equatorial. Also, a good many special evenings have been given to schools and teachers; a total of 2,250 persons were admitted.

The division of the alt-azimuth.—The reduction of the 5,400 observations secured from 1903 to 1907 is practically finished, but the results require further discussion. This is in course. The reduction of the 2,500 observations secured from 1898 to 1903 has been begun, and considerable progress has been made.

In the spring of 1910, after a prolonged spell of very damp weather, it was found that there was a recurrence of the trouble of rust on the steel circle, notwithstanding the fact that it had been copper plated, silver plated, and then painted to protect it from corrosion.

Division of the prime vertical.—It has been continued in use in making observations in the work of obtaining the aberration and the nutation constants, and the variation of latitude. The plan of observing sixteen stars divided into four groups of four stars each has been continued.

The observations up to January 1, 1907, are reduced and checked. Those of 1908 are reduced to apparent place. Those of 1909 are not yet copied on sheets.

Division of reduction of observations in arrears.—The work on the Washington Zone Catalogue, 1846-1852, has been completed with the exception of the identification of a certain few stars upon which both the 26-inch and 12-inch equatorials are engaged. The results of these searches will be entered on the proof sheets. The work will appear in a short time as Volume VII, Publications of the United States Naval Observatory, second series. It was sent to the printer in May, 1910, and 281 pages are now in type. This volume contains the positions of 23,626 stars between $13^{\circ} 35'$ and $45^{\circ} 25'$ south declination, based on 44,500 observations made at the Naval Observatory, 1846-1852.

The reduction of the observations made with the 9-inch transit circle 1903-1910, is well advanced, and it is expected that this work will be ready for the printer in the autumn of 1911. It includes at least four observations of each of the stars in Gill's catalogue of 2,798 zodiacal stars, four of each of the stars in Hedrick's zodiacal catalogue of ten of each of the stars in Newcomb's suggested list of fundamental stars. From 30 to 100 or more observations have been secured of each of the clock and azimuth stars. Except for the application of the clock correction after May 1, 1909, the reduction of these observations is completed to May 6, 1910.

The reduction of the sun, moon, and planet observations, about 3,000, for this same period, is in practically the same state.

During the year 27,400 star observations have been copied on cards, including all the observations made up to April, 1907. These observations have been grouped by clamos and observers and the differences determined for pairs of observers, taking the north and south stars separately.

In May the reduction of 2,500 observations made on the alt-azimuth instrument from 1898-1903 was commenced and good progress has been made. These, together with the 5,400 observations 1-03-1907, which have already been reduced, will be ready for the printer in the course of a year.

Department of the Nautical Almanac.—The American Ephemeris and Nautical Almanac for the year 1912, enlarged and improved, was printed and distributed in December, 1909. In this volume the length and breadth of the book are somewhat reduced without reducing the size of the type or the amount of matter on each page, and the quality of the paper used is better. It contains 737 pages as against 603 pages in the volume for the year 1911, the latter including 74½ pages of lunar distance tables, which, as stated in the last annual report, are omitted from the volume for 1912. Of the 209 new pages, 40 are due to the placing of 4 instead of 5 ephemerides of ten day stars on a page, in order to make possible the use of larger type, leaving 169 pages of new matter.

The large number of changes introduced into a single volume of the Ephemeris naturally gave rise to unusual liability to error, and an attempt has been made to meet this contingency by taking unusual care and the adoption of additional safeguards. Thus far nine errors have been discovered and reported.

The preparation of the Ephemeris and Nautical Almanac for the year 1913 is well advanced and 525 pages are in type. In addition to the contents of the volume for 1912 this volume will contain ephemerides for physical observations of the sun, moon, and planets. The arrangement will be similar to the volume for 1912. It is expected to print the 1913 volume in one edition, and for 1912 and thereafter not to print the appendix "Star List of the American Ephemeris" nor the appendix "Stars for Navigators and Polaris Tables," nor other appendix to the Ephemeris. The two star lists above mentioned will be printed for 1911, and are nearly ready for publication.

The distribution of the publications of the Naval Observatory during the year is as follows:

Name of publication.	Naval service.	Other departments.	Superintendent of Documents.	Free distribution.	Total.
American Ephemeris and Nautical Almanac.....	588	659	230	510	2,011
American Nautical Almanac.....	601	201	26	9	811
Astronomical Papers.....	75	.....	1	688	764
Stars for Navigators.....	874	51	200	289	1,414
Star List of American Ephemeris.....	266	109	50	573	998

THE DEPARTMENT OF NAVY COMPASSES.

The stock of compass material has been maintained at the navy-yards, new ships have been outfitted, and the outfits of old ships kept in repair. The substitution of 0-360° compass graduations for 0-90° graduations has continued and now all ships of the first rate have a complete equipment of 0-360° compasses.

The former instructions in regard to compass reports have been revised and systematized by General Order No. 54. The reports from ships have been card-indexed. New forms for 0-360° work with new tables for computation have been issued. A new form for time azimuths is being printed.

A new Type VII binnacle, illuminated from below, using a transparent compass card has been developed and is being tested. For the present the old lighting arrangements are retained, permitting the use of the old type compasses, if desirable.

A new Type II Flinder's bar has been developed and issued for trial.

A new Type IV azimuth circle with attachment for star azimuths has been issued for test.

A telescopic attachment is being fitted to the illuminated dial pelorus.

Projection compass.—Owing to the close proximity of the dynamo room to the central station, it has been found necessary to find a compass location forward free from magnetic influences. On the U. S. S. *South Carolina* a compass location in the forehold has been selected and the reading of the compass card is projected optically 104 feet to the conning tower, and also to the central station. A preliminary inspection of the optical outfit was very successful, it being easier to read the compass heading 104 feet away than at the compass itself. Between this system and the gyro-compass lies the solution of the problem of the battle compass; for the purpose of fire control as well as for accurate battle steering, the battle compass is of vital importance in battle efficiency.

Gyro-compass.—From November, 1909, to May, 1910, a gyro-compass, the manufacture of Anschutz & Co., of Kiel, Germany, has been under test on the U. S. S. *Birmingham*. This compass depends for its directive force upon the force of gravity combined with the revolution of the earth; after a short preliminary period of oscillation across the true meridian, it finally settles down and remains in the true meridian. As it is entirely independent of magnetic influences, it affords a very satisfactory solution of the battle compass problem, provided the delicate mechanism is capable of withstanding service conditions. Under the care of an expert attendant, it has shown to be very accurate and reliable for the period under test. As its directive force is much greater than that of the magnetic compass, it may be used as a transmitting compass to transmit the compass reading to various places in the ship. The optical system of transmission may also be used with the gyro-compass. The question of its adoption is now under consideration.

Auxiliary battle compasses.—The magnetic compass installed in the steering engine room has been found to be satisfactory as an auxiliary battle compass, provided the nearest large mass of magnetic material is at least 5 feet away.

Great attention has been devoted to the location of compasses in relation to the surrounding material. It has been found that through inadvertence magnetic material has been placed so close to compasses that they have been rendered unreliable. To guard against this condition a general guide indicating the minimum distance of magnetic material from compass locations for the use of those concerned in the design or repair of ships has been prepared and is under consideration.

Through information received from abroad it has been found that the equipment and facilities afforded the compass office in foreign navies are much more adequate than those afforded here, and attention is invited to the desirability of improving the facilities.

At present all compass material is inspected at the place of manufacture, which is an undesirable arrangement for the following reasons:

1. The factories are located in the heart of large cities where the magnetic conditions are variable.
2. Some of the manufacturers have very crude testing appliances.
3. The material tested may become out of adjustment before delivery, and no appliances exist at navy-yards for making the necessary tests.
4. It is possible to substitute rejected or untested material for the material actually inspected.

All the above objections would be eliminated by the establishment of a central compass depot.

It is recommended that a central compass depot be established for the inspection, storage, and issue of compass material; this depot to be equipped with adequate testing appliances and a nonmagnetic house for testing work.

DEPARTMENTS OF NAUTICAL INSTRUMENTS AND GENERAL STOREKEEPER.

The work of these departments is increasing in about the same ratio as are the ships which are to be supplied with instruments through this observatory.

DEPARTMENT OF CHRONOMETERS AND TIME SERVICE.

The usual work of the department in the rating and issue of chronometers and the sending out of the daily telegraphic noon signals proceeded as heretofore. The mean daily error of the noon signal for the year was $0^{\circ} .05$, and the maximum was $0^{\circ} .26$.

A special telegraphic time signal was sent out at 6.20 a. m., December 22, 1909, by request of the Chief Signal Officer of the Army, to mark the instant when the sun turned north in declination. It was transmitted by telegraph and wireless throughout Alaska, in order to signal the welcome northward motion of the sun and the approaching end of winter.

The New Year's eve signals were sent out as usual, at midnight, 1, 2, and 3 a. m., to mark the exact instant of the beginning of the new year in each of the great standard time zones of the United States.

BUILDINGS AND GROUNDS.

The grading of the Normanstone estate leaves a small triangle of government property south of and bordering on Massachusetts avenue adjoining the Observatory circle. The throwing into the market of the Normanstone property indicates the early cutting of this part of the roadway around the Observatory circle. Following this will necessarily come the grading of the Observatory circle bordering on the new roadway. This is likely to involve a considerable expenditure, and also the removal from its present site of the large wooden stable which was built for the use of the observers occupying the two observers' dwellings.

In the matter of the property lying within the Observatory circle not yet acquired by the Government, the piece belonging to the Normanstone property has recently been the subject of negotiation between the owners and the department. Of the Home School property, it is recommended that a special act be asked for to secure the part lying within the circle.

HYDROGRAPHIC OFFICE.

The Hydrographic Office was placed under this bureau on July 1, 1910, and was, during the entire fiscal year, a part of the Bureau of Equipment.

The annual report of the Hydrographer for the year is submitted separately herewith as an appendix, marked "Appendix A." His pertinent comments and recommendations will receive earnest consideration by this bureau.

The work of the Hydrographic Office has progressed satisfactorily and the usual high standard of efficiency has been maintained in amount and quality of work. The increasing demand ashore and afloat for its publications is proof of its constantly growing usefulness and importance to the merchant marine as well as the navy. To meet this demand much additional work has been entailed upon its limited personnel, and it is evident that the facilities of men and means are no longer adequate to the requirements.

It is desired to invite particular attention to the state of surveys and charts. About half the charts furnished to our fleet must still be purchased from England, for the reason that the means at our disposal for surveying, drafting, engraving, and chart printing are merely sufficient to keep up the constant revisory work on those already completed, adding but few new titles from year to year. The same is true of sailing directions, there being 34 American and 37 British titles furnished to our ships.

This most unsatisfactory situation has been repeatedly reported in past years, and relief by legislation sought but not obtained. If the annual tribute of \$10,000 paid for foreign charts and books for the navy were capitalized at 2 per cent the resultant one-half a million dollars would more than cover the outlay necessary for a suitable building, fully equipped to carry on this important and urgent work.

Besides this condition of not being able to properly cover the oceans of the world with charts and sailing directions, the Hydrographic Office finds its current output growing from year to year without any adequate increase in force. The annual appropriation for civil employees is practically the same as that at the time of the breaking out of the Spanish war. The office is further hampered by recent legislation depriving it of the required technical services of the necessary number of naval officers.

The bureau is of the firm opinion that a sound business policy, as well as patriotic reasons, should move the department to strengthen the Hydrographic Office in every available way to the end that it may, as soon as possible, be able to outfit the fleet with none but American-made charts and nautical books.

Very respectfully,

R. F. NICHOLSON,
Chief of Bureau.

The SECRETARY OF THE NAVY,
Navy Department, Washington, D. C.

APPENDIX A.

DEPARTMENT OF THE NAVY, HYDROGRAPHIC OFFICE, *Washington, D. C., September 8, 1910.*

SIR: I have the honor to submit the report of the hydrographer for the fiscal year ending June 30, 1910.

Summaries of the reports of chiefs of divisions and of the (acting) chief clerk of the Hydrographic Office giving further details being hereunto attached (marked "Inclosures A, B, C, D, and E").

In response to the needs of the navy and the insistent demands of commerce, orders were issued by the Navy Department in October, 1909, to begin the survey of the east coast of Central America, utilizing for such work the gunboats on duty in those waters. Due to the revolution in Nicaragua, which broke out at about that time, the ships were diverted from survey work and no headway was made therewith. The survey of Boco del Drago, Panama, was finished by the U. S. S. *Eagle*, which then proceeded to Haiti and resumed its survey of the south coast of that island, extending the work from Aguin Bay to False Cape. The topographic survey in the neighborhood of the Guantanamo naval station was extended to the westward $3\frac{1}{2}$ miles on a strip about 2 miles wide. The Cape Cruz-Casilda survey expedition carried its work from Gua Point, near Manzanillo, to Santa Cruz del Sur. This survey is now completed between Cape Cruz and Mate Cays to the southward and westward of Santa Cruz del Sur with the exception of an area of hydrography between latitudes $20^{\circ} 15'$ north and $20^{\circ} 30'$ north and longitudes $77^{\circ} 52'$ west and $78^{\circ} 08'$ west. Some surveying, apparently of a superficial character, was done by the officers attached to the naval station at Tutuila, Samoa, in the waters near said station.

In addition to the data furnished to the Hydrographic Office by the surveying parties invaluable hydrographic information has been received from various ships of the navy, the Revenue-Cutter Service, the Coast and Geodetic Survey, the Light-House Establishment, and other seafaring people the world over.

The Division of Chart Construction has been mainly engaged in the correction of chart plates on hand, printing charts therefrom, and lithographing pilot charts, with the consequent result that few new charts have been engraved or lithographed, the force of employees and mechanical equipment being inadequate to meet the demands thereon. Due to this pressure of work there were only four new charts engraved on copper. There were also three charts engraved on copper by contract. Seven new lithographic charts were also issued by this division.

At the end of the fiscal year the Hydrographic Office had for issue the following different charts and plans:

Hydrographic Office charts.....	1, 738
Coast and Geodetic Survey charts.....	596
British Admiralty charts.....	2, 053

It is thus seen that the navy is still dependent upon the British Admiralty for about 50 per cent of the charts required. This not only entails an annual payment of about \$10,000 to English chart makers, but might in time of war prove disastrous, as charts would probably be declared contraband. In this connection it is again desired to invite attention to the fact that a suitable fire and damp proof vault should be built to store the 1,738 engraved copper plates belonging to the office. It has taken thirty-odd years and great expenditures to produce these invaluable plates.

The Division of Sailing Directions publishes the weekly Notice to Mariners, corrects the archive charts in accordance therewith, and compiles publications consisting of sailing directions and other navigational works. The following table will show the growth of the weekly publication, Notice to Mariners, during the last three years and the additional work due thereto:

Year.	Articles printed.	Copies printed.	Extracts printed.
1908.....	2, 263	101, 400	972, 315
1909.....	2, 680	113, 460	1, 001, 045
1910.....	3, 130	215, 500	1, 057, 825

The growth in number of articles published shows the increase in the number of reports received, and in consequence the navy is kept better informed as to sea and harbor conditions throughout the world.

Nine thousand four hundred and fifty corrections were made in the archive charts. During the year 1,000 foreign documents, books, etc., printed in twelve different languages, were examined and extracts translated therefrom. Three Coast Pilots of Asia, covering the waters from Bering Sea to the Straits of Malacca, were printed and issued, as were other navigational works. In response to letters of inquiry from the navy and the mercantile marine this division supplied information upon a variety of subjects, including navigation, nautical astronomy, seamanship, and piloting. Due to an inadequate force of naval officers and civil employees the division has been unable to further extend its work upon sailing directions, a much needed revision of Bowditch, and the modernization of other navigational works. As with charts, so with "sailing directions," we are largely dependent on the British Admiralty; the Hydrographic Office publishes 19, the Coast and Geodetic Survey 15, and we have to purchase from the British 37 a dangerous as well as humiliating condition.

The Division of Chart Supply is charged not only with the supply of charts, as its name indicates, but with their accurate cataloguing, correction to date, selection for distribution, and with similar work in connection with sailing directions and navigational books. It is also

charged with a proper distribution of confidential charts and other confidential navigational matter. The development of naval science and strategy lately brought about the division of the waters of the world into three naval stations, which will necessitate a revision and reissue of the station catalogues for the navy. The North and South Atlantic and Mediterranean should be combined in one catalogue. The Pacific station catalogue requires no great change. The Asiatic catalogue should be revised so as to cover the waters added to that station. These catalogues should all be revised, brought up to date, and reissued. This work requires the supervision of a naval officer of experience.

During the fiscal year this office distributed 100,116 charts and corrected 181,430.

The Division of Pilot Charts and Branch Offices is charged with the editing of the pilot charts, Hydrographic Bulletin, reprints, and daily memorandum; correspondence with observers and sales agents; mailing and handling of supplies, sale of publications, and supervision of branch offices. It is the division that receives and gives out to the world the ephemeral news of the sea.

The Daily Memorandum is a typewritten sheet sent out to the fleet and branch offices. In it are shown items of immediate interest to navigators, but any dangerous wreckage reported off our coasts is telegraphed to the proper naval wireless telegraph station, which at 2 p. m., 10 p. m., and 6 a. m. sends it out to sea, broadcast, for the benefit of passing vessels. Similar messages are accepted from vessels at sea by the wireless stations and wired to the Hydrographic Office.

The Hydrographic Bulletin, published weekly, covers all the oceans and the Great Lakes. In it are published obstructions dangerous to navigation and miscellaneous items of more or less temporary value to navigation; it is largely compiled from the Daily Memorandum. The edition of the bulletin averages 5,470 copies a week, containing about 50 items each.

The Pilot Chart is now issued monthly for the North Atlantic, North Pacific, and Indian oceans and quarterly for the South Atlantic and South Pacific oceans. It shows outlines of the continents and islands, with the wireless telegraph stations thereon, meridians of longitude, circles of latitude, true compass, lines of equal variation of the compass (an inset chart shows the rate of annual change in variation), currents, sailing ship routes, low-powered and full-powered steamship routes, average meteorological conditions, storm tracks, and temporary obstructions to navigation—such as derelicts, ice, etc. The back of the Pilot Chart has been utilized for the publication of articles upon navigation subjects, such as "The use and interpretation of charts and sailing directions," "Doubtful shoals and dangers," "Changes in the deviation of the compass in steel-built freight vessels due to changes in cargo in the process of loading and unloading," "Observations of waves at sea," "Disproof of the existence of Reed or Redfield rocks," etc.

During the fiscal year there were issued 109,410 pilot charts. The Hydrographic Bulletin and the pilot charts are issued not only to the navy but to marine observers of all nationalities in all parts of the world, in return for marine observations made by them and sent to the Hydrographic Office. Thus, these two publications not only keep the marine world posted upon all matters affecting naviga-

tion but serve as a means of obtaining data for not only these publications but for the navigational charts and sailing directions of the world. They are invaluable, and aid greatly in furthering the interest and lessening the dangers of navigation. Neither publication has been the subject of unfavorable criticism, but on the contrary all over the world both have received the highest praise.

This division of the Hydrographic Office has edited and published reprints of matter that had previously appeared in the Hydrographic Bulletin and on the back of the pilot charts. The great demand that has been made for these reprints is proof of the good favor with which they have been received. This division has charge of printing (except "Notice to Mariners"), mail (except to the navy), and handling supplies that are in common use throughout the several divisions and the branch offices. It also has charge of the sales of Hydrographic Office publications. During the year there were 17,043 charts and 8,388 books sold. It also has charge of the correspondence with sales agents and other purchasers, branch hydrographic offices, and marine observers. All of which correspondence is heavy and increasing.

The force of employees in the Division of Pilot Charts and Branch Offices is inadequate and unable to keep up the current work, such important reports as "Route reports," "Port facilities," and "Ocean currents" accumulating more rapidly than they can be handled; due also to this lack of an adequate force it has been impracticable to make a much-needed card list of cooperating observers and others entitled to receive Hydrographic Office publications, addresses numbering over 10,000.

The branch offices, 16 in number, situated at the principal sea and lake ports, are the principal means of keeping in touch with the sea, getting information therefrom and supplying it thereto—such as channels, depths, distances, tides, correct time, chart corrections, ice, obstructions afloat and under water, temporary or permanent, etc. This duty is most satisfactorily performed when the one in charge of the branch office personally visits ships upon their arrival in port. This is especially true at the great ports, where naturally the greater part of the information is received, as masters of ships arriving in port either are too busy to go to the branch office or are disinclined to use what leisure they have for such purpose. The results obtained from the branch offices have been as good as could have been expected under the circumstances, particularly so as in several cases the offices are in charge of men who are not in any sense of the word "seamen." Each of said offices should be in charge of a naval officer who has made good as navigator on a seagoing ship, for he, being a sailor and conversant with the sea, could successfully approach masters and mates in search of information. During the fiscal year officers in charge of branch offices at Boston, New Orleans, and on the Lakes have delivered lectures on navigational subjects to officers of the naval militia and of the mercantile marine. This innovation immediately met with approval.

The main office in the Hydrographic Office is in the immediate charge of a nautical expert acting as chief clerk. He has charge of the general business of the office, including accounts of expenditures under the various appropriations, requisitions for supplies, approv-

ing and forwarding requisitions from the branch offices, etc., making out pay rolls, bills of sales for the Hydrographic Office publications, keeping accounts of 60 agents, making up yearly estimates for appropriations, writing the official correspondence for the Hydrographer, indexing and filing correspondence received and sent, indexing and filing books and pamphlets received for the archives, making the yearly, quarterly, and monthly reports, sending and receiving shipments by freight and express. The acting chief clerk, due to a lack of force, has personally to do a great part of the clerical work, especially that connected with requisitions and financial matters. The necessity for his doing detail rather than supervisory work is a detriment to the proper performance of his duty as chief clerk.

The Hydrographer, being in charge of the Hydrographic Office as a whole and of the branch offices, to properly administer the same must necessarily depend upon his subordinates for details of the executive work, which he could not take up successfully without neglecting the administration of the whole.

That the Hydrographic Office, responsible for the publication of technical information which must be mathematically exact, may be properly administered, the Hydrographer should have the necessary competent assistants and not be forced to take up details of work. Such details hamper administrative work, and the frequent interruptions due to administrative work prevent detail work being properly handled. The work of the Hydrographic Office during the fiscal year is deemed to have been up to the standard heretofore maintained; but, due to the increased volume of work put upon it by the ever-growing needs of the expanding navy and the increasing popularity of the office itself with the seafaring community of the world, its output continues to fail to meet the demand, as the number of employees and the equipment of the office have not been proportionately increased. This lack of a sufficient force of employees has also prevented a needed modernization of the business methods of the office. Further, in consequence of the clause in the legislative, executive, and judicial appropriation act which limited to two the number of naval officers assigned to duty in the Hydrographic Office, said office, beginning July 1, 1910, has had the services of but two officers. The Hydrographic Office, thus undermanned, and suffering from a lack of naval officers, trained and experienced not only in navigation and seamanship but versed in the needs and requirements, must necessarily, in spite of the best efforts, deteriorate not only in the volume of its output but in the character thereof. In this connection it is desired to invite attention to the fact that there are employed in the hydrographic office of Great Britain 14 naval officers, in that of Germany 12, and of Japan 7.

In May, 1909, the Weather Bureau of the Department of Agriculture began the issue monthly of ocean meteorological charts. As such work appeared to be a duplication of the pilot charts issued by the Hydrographic Office, it was so represented to the department, which took the matter up with the Department of Agriculture. Pending any result from the conference brought about thereby, the question was brought up in Congress and the legislation restricting the number of officers in the Hydrographic Office to two apparently resulted from the discussion of this question.

The pilot chart grew into being as the result of the labors and research of Lieutenant Maury. The navy of the United States was the pioneer in publishing work of this kind. Neither its usefulness nor its accuracy have ever been questioned. It is known throughout the world as being published by the Hydrographic Office. There is nothing in the published hearings of the Committee on Appropriations of the House of Representatives nor in the Congressional Record to show that its well-earned reputation was in any way questioned. Although Congress, by its action, recognized that the pilot charts should be published by the Hydrographic Office, the Weather Bureau still continues to issue ocean meteorological charts.

On the 29th of November, 1829, the board of navy commissioners made to the Secretary of the Navy a recommendation which was the initial step taken toward establishing a branch of the Navy Department devoted exclusively to furthering the interests and lessening the dangers of navigation. In the following November Lieut. L. M. Goldsborough, in a letter to the Secretary of the Navy, stated: "First. That a suitable place be designated to serve as a general depot for all the chronometers, instruments of reflection, theodolites, circles, telescopes, charts, etc., belonging to the navy." Thus, the original inception was that a branch of the Navy Department be established, which was to have charge of all matters, including chronometers as well as charts, that bore upon the safe navigation of the seas. In 1837 Lieut. James M. Gillis became the superintendent of the depot. The controlling idea of Lieutenant Gillis was to erect an observatory rather than a simple depot for charts and instruments, and during his incumbency "a new depot and observatory" was built. He was succeeded in 1844 by Lieutenant Maury. While Lieutenant Gillis had been inclined to favor the astronomical part of the depot, Lieutenant Maury's energies were devoted almost entirely to hydrographic subjects. At the outbreak of the civil war, Lieutenant Maury, having left the service of the United States, Commander James M. Gillis, the original builder of the depot, became its superintendent. During the civil war period the depot and observatory became more a naval observatory and less a hydrographic office. In October, 1865, this fact being recognized by the Chief of the Bureau of Navigation, he recommended that a hydrographic office be established. On the 21st of June of the following year the Hydrographic Office came into being, and the connection between it and the observatory was severed by law. The act of Congress passed on that date established a Hydrographic Office "for the improvement of the means for navigating safely the vessels of the navy and of the mercantile marine by providing, under the authority of the Secretary of the Navy, accurate and cheap nautical charts, sailing directions, navigators, and manuals of instructions for the use of vessels of the United States, and for the benefit and use of navigators generally."

Under the present organization there exists a Naval Observatory, a Compass Office, and a Hydrographic Office. The Hydrographic Office has no control over compasses, chronometers, or other instruments.

It is deemed that the interest of the fleet makes pertinent the recommendation that a return be made to the original idea conceived in 1829 that there be a branch of the Navy Department devoted exclu-

sively to furthering the interests and lessening the dangers of navigation, and that all matters that pertain to or affect the navigation of ships be centralized in the Hydrographic Office. It is deemed that the time service and the care of chronometers, so essential to the fleet and so intimately associated with the fleet's other navigational essentials, should be in charge of the Hydrographic Office. This astronomical work need in no sense carry with it the wider scope of the Naval Observatory, as purely astronomical matters and equipment therefor could remain in charge of the Naval Observatory. It is therefore recommended that the Hydrographic Office (in the Bureau of Navigation) have under it three divisions, namely, surveys, charts, and instruments. These divisions to be subdivided into such subdivisions as may be necessary to properly allot and distribute the work; the survey division to have charge of all surveys, surveying parties, etc.; the chart division to have charge of the preparation of data and the publication of charts and navigational works; and the instruments division to have charge of compasses, chronometers, and other navigational instruments, the maintenance and repair of the same and everything connected therewith.

It is self-evident that all the lines of work outlined in the above organization are so intimately connected and intertwined, one with the other, that to get the best results they should be under the one central control. Charts are graphic portrayals of surveys. The chart maker must be closely connected with the surveyor. The surveyor must utilize the compass and chronometer, and the other navigational instruments. All these must be placed at his disposal by a central authority and utilized as directed by that central authority. Those in charge of compasses, chronometers, and instruments, must carefully correct them and keep them in readiness for the surveyor's use in order that he may make such observations and keep such records as will enable the chart maker to construct his chart. Thus, the chart maker should be in close touch with those in charge of compasses, chronometers, and instruments. In all this work each division, guided by and administered by the hydrographer, should keep ever in mind that the reason for its existence is the fleet, its work is for the fleet, and upon the accuracy and faithfulness of said work depends not only the safety of the fleet but possibly the safety of the country in the event of war.

It is deemed that the above recommendation is in accordance with the department's intention heretofore outlined, which due to late legislation limiting to two the number of officers in the Hydrographic Office, it has been impracticable to put in force. It is, therefore, most earnestly recommended that the department take such steps as may be necessary to enable it to order the necessary number of officers to duty in the Hydrographic Office and to provide the necessary number of employees to carry on the work. Chart work, compass work, chronometer work, and surveying are all professionally advantageous to the officer and tend to make him the better navigator, a result beneficial to the navy. Tacks and sheets have disappeared, but the navy must have good charts and good navigators, as well as good guns and good gunners. The Hydrographic Office deems it is carrying on most necessary work for the navy and humbly but most earnestly begs the cooperation of all who have the welfare of the fleet at heart.

In submitting this report it is desired to invite attention to the report of the Hydrographer for the fiscal year ending June 30, 1909.

Very respectfully,

J. J. KNAPP,
Captain, U. S. Navy, Hydrographer.

The CHIEF OF THE BUREAU OF NAVIGATION,
Navy Department.

A.

SUMMARY OF ANNUAL REPORT, DIVISION OF CHART CONSTRUCTION, HYDROGRAPHIC OFFICE, FOR FISCAL YEAR ENDING JUNE 30, 1910.

Eleven new charts have been published during the year. Of these, 4 are engravings and 7 lithographs. There are 60 charts under construction unfinished at the close of the year.

Of the 11 charts let by contract last year to The Hydro Engraving Company (Incorporated), Washington, D. C., 3 have been delivered and have been assigned the following numbers in the Hydrographic Office catalogue: 1606, 2556, and 2558.

Data has been prepared and delivered to The Hydro Engraving Company to be used in the engraving of 18 charts for which contract has been made.

Seventy charts have been extensively improved by the incorporation of recent surveys or other important data and by the substitution of new standard compass rose for the old-style one. The compass rose has been changed on 255 chart plates, and the total number of compasses engraved on copper during the year is 602. Four hundred and ninety-seven charts, the majority on copper, have received minor additions and corrections. This vast amount of correction work on the part of the draftsmen and engravers has materially lessened the number of new charts published during the year.

Twenty-seven charts have been electrotyped in the electrotyping laboratory of the office. Of these, 18 are altos and 9 are bassos.

The number of navigational charts, other than pilot charts, printed during the year and delivered for sale and distribution, was 64,512. Pilot charts as follows were printed: 66,068 of the North Atlantic, 40,296 of the North Pacific, 17,652 of the South Atlantic, 22,464 of the South Pacific, 19,425 of the Indian Ocean, and 10,048 of the Great Lakes. Total pilot charts printed, 175,953. Grand total of all charts printed, 240,465.

Nineteen pieces of miscellaneous work, such as reprints, official forms, etc., were printed in the lithographic section.

The party of civilians under Mr. H. L. Ford has been at work on the south coast of Cuba to the westward of Guantanamo, and has been engaged in making a topographic map of the region west of the station. The work of the season began at the western boundary of the station, and a strip about 2 miles wide was carried $3\frac{1}{4}$ miles.

The U. S. S. *Eagle* was engaged during all the first part of the season in reconciling some discrepancies in the surveys of Boca del Drago. In this work she encountered difficulty in the way of identifying permanent marks left by former surveys, with the result that far more time was consumed than had been anticipated. When this was completed she, on March 5, 1910, proceeded to the coast of Haiti and resumed work on the survey of the south coast of that island, extending the work from Aquin Bay to False Cape.

The Cape Cruz-Casilda survey party, consisting of the U. S. S. *Hist*, with barge No. 123 and its force of surveyors and employees, was engaged throughout the season in the prosecution of that survey. The coast line and hydrography between Gua Point (near Manzanillo) and Santa Cruz del Sur was surveyed. The past season's work completes the survey of the coast and hydrography between Cape Cruz and Santa Cruz del Sur.

A start has been made on the survey of the east coast of Costa Rica, but really only the preliminary work has been done, owing to the insurrection going on in that vicinity.

Surveys made by the officers on duty in Samoa of parts of Pago Pago Harbor have been received, also sheets of Leone Bay and approaches to Pago Pago. Additional data of this work is yet to be received.

On June 30, 1909, editions of 317 charts that had been requested by the Division of Chart Supply remained unprinted. On June 30, 1910, editions of 144 charts that

had been requested by the Division of Chart Supply remained unprinted. Thus the total shortage in charts asked for and not delivered has during the year been reduced 203 editions. To make the progress indicated in this statement has meant the practical abandonment of new work.

B.

SUMMARY OF ANNUAL REPORT ENDING JUNE 30, 1910, DIVISION OF SAILING DIRECTIONS.

The following were printed and issued during the year:

No. 9, American Practical Navigator, printed and issued.

No. 73, Newfoundland and Labrador, issued.

No. 89, Supplement West Coast of South America, printed and issued.

No. 118, Sun's Declination and Equation of Time, printed and issued.

No. 122, Asiatic Pilot, Volume I, printed and issued.

No. 123, Asiatic Pilot, Volume II, revised and printed.

No. 124, Asiatic Pilot, Volume III, printed and issued.

No. 127, Star Identification Tables, printed and issued.

No. 64, Supplement to the Gulf of Mexico and Caribbean Sea, Volume II, printed and issued.

Index to Notices to Mariners for 1909, printed and issued.

Notices to Mariners.—There were 52 editions of from 2,500 to 4,600 copies each.

Number of copies printed, 216,500; number of extracts, 1,057,825. Attention is invited to the increase in the amount of material published and issued in these notices:

Year.	Articles.	Copies.	Extracts.
1908.....	2263	101,400	972,315
1909.....	2680	113,460	1,001,045
1910.....	3130	216,500	1,057,825

During the year over 1,000 foreign documents, books, etc., in twelve languages have been examined and extracts translated.

There have been received in the archives from all sources during the year 4,255 charts. Charts canceled number 2,439, leaving a net gain of 1,816. In addition there have been placed upon the shelves 604 retired Hydrographic Office charts, or a total increase of 2,420.

About 9,450 corrections have been transferred from old to new charts and 20 sets of index charts and catalogues, as well as other necessary books, have been corrected to date.

SAILING DIRECTIONS.

The division has responded to numerous calls for information upon a variety of subjects, including navigation, nautical astronomy, seamanship, and piloting. Many of these involved the computation or measurement of navigable distances between different points.

C.

SUMMARY OF ANNUAL REPORT DIVISION OF CHART SUPPLY, 1910.

Charts issued to United States vessels.....	23,457
Charts sold.....	17,043
Charts expended for other official purposes.....	7,253
Individual charts published to date.....	1,738
Hydrographic Office charts corrected from Notices to Mariners and other sources.....	100,769
Hydrographic Office standards corrected from Notices to Mariners.....	1,312
Hydrographic Office charts on issue.....	1,738
United States Coast Survey charts on issue.....	596

British Admiralty charts on issue.....	2,033
Station catalogues issued.....	398
Station catalogues on hand.....	534
Hydrographic Office catalogues expended.....	109
Hydrographic Office catalogues on hand.....	20
Complete outfits furnished (charts).....	17
Incomplete outfits furnished (charts).....	38
British Admiralty publications on hand.....	1,153
British Admiralty publications received.....	712
Commerce and Labor publications on hand.....	1,264
Commerce and Labor publications received.....	3,306
Complete outfits furnished (sailing directions).....	16
Special outfits furnished (sailing directions).....	18
Submarines outfits furnished (sailing directions).....	6

D.

SUMMARY OF ANNUAL REPORT OF DIVISION OF PILOT CHARTS AND BRANCH OFFICES
FOR THE YEAR ENDING JUNE 30, 1910.

GENERAL DUTIES.

(a) Compile and edit Daily Memorandum; Hydrographic Bulletin, weekly; three Pilot Charts, monthly; two Pilot Charts, quarterly; and reprints of hydrographic information.

(b) Correspondence with observers and sale agents, sale of publications.

(c) Purchase and care of supplies and stationery; mailing of supplies, stationery, blanks, and periodical publications; printing requisitions for stationery, blanks, and publications.

(d) Supervision of Branch Hydrographic Offices.

PUBLICATIONS.

Daily Memorandum.—Consists usually of one typewritten sheet giving reports on obstructions to navigation in all oceans and the Great Lakes. Edition, 150; sent to branch hydrographic offices and the battle-ship fleet.

Hydrographic Bulletin.—Weekly sheet of three or four columns. Edition, 5,470; pertains to all oceans and Great Lakes; items similar to those in Daily Memorandum. The number of paragraphs in fifty-one weeks was 2,469, divided among the oceans as follows: North Atlantic, 1,871; South Atlantic, 30; North Pacific, 253; South Pacific, 40; Indian, 28; Great Lakes, 121; unclassified and general, 126. On the North Atlantic, the paragraphs relate to the following subjects: Derelicts and wrecks, 140; icebergs, 326; miscellaneous, 1,405.

Pilot Charts.—The average editions of these were as follows:

North Atlantic (monthly).....	5,400
North Pacific (monthly).....	3,160
Indian Ocean (monthly).....	4,350
South Atlantic (quarterly).....	4,350
South Pacific (quarterly).....	5,500
Great Lakes (two issues) (each).....	5,000

Reprints of hydrographic information.—Ten pamphlets averaging 21 pages each with an edition of 10,000 copies each.

OUTPUT FOR THE YEAR.

The number of charts, pamphlets, and bulletins printed and issued was:

Hydrographic Bulletin, 284,440, 52 issues.

Pilot Charts:

North Atlantic Ocean, 64,750, 12 issues.

North Pacific Ocean, 37,960, 12 issues.

South Atlantic Ocean, 14,500, 4 issues.

South Pacific Ocean, 22,000, 4 issues.

Indian Ocean, 17,400, 5 issues.

Great Lakes, 10,000, 2 issues.

Reprints, 100,000, 10 issues.

NOTE.—The reprints have not all been issued yet. All of the foregoing are considerably in excess of the figures for last year.

Address labels, letterheads, mailing wrappers, and blank forms printed during the year, 418,695. In addition to the above, this division also mailed 998,400 Notice to Mariners and extracts therefrom.

SALES.

Chart sale, 17,043 copies at \$3,962.14.

Book sale, 3,389 copies at \$2,517.77.

PERSONNEL.

The best efforts of the employees are more than required on routine matters, leaving some necessary lines unaccomplished, such as indexing, carding, and preparing for publication numerous port facilities reports, route reports, and current reports, indexing the names and addresses of cooperating observers and others entitled to our publications as listed at the branch hydrographic offices and the main office. There are required, to keep up with and continue this work in hand, one more nautical expert, one typewriter, and one helper.

BRANCH HYDROGRAPHIC OFFICES.

The work of the branch offices has proceeded with increased vigor and exceeds that of previous years in many respects; for example, in the number of letters and acknowledgments written, vessels visited, and visitors received; and the canvass of shipmasters, owners, and agents for new observers afloat. A new activity engaged in by several branch offices, notably those on the Great Lakes, was to deliver lectures and give instruction on charts and navigation to the officers of the Naval Militia in addition to the usual instruction work given to shipmasters and mates.

A table is attached summarizing in some detail the work at the branch offices.

Tabular statement of work done by the branch hydrographic offices during the fiscal year ending June 30, 1910.

Character of work.	Atlantic and Gulf coasts.							
	Boston.	New York.	Phila- delphia.	Balti- more.	Nor- folk.	Savan- nah.	New Or- leans.	Galves- ton.
Distributed:								
Bulletins, Hydrographic.....	20,922	24,825	12,943	4,601	11,452	9,415	6,871	4,926
Daily Memorandums.....	345	1,525	915	482	2,224	104	1,600	1,100
Day Marks (L. H. B.).....	621	441	441	152	302	157	440	94
Notices to Mariners.....	77,728	75,148	93,775	7,192	20,103	19,111	9,446	9,798
Pamphlets (not H. O.).....	267	97	55	0	4,281	98	698	36
Pilot Charts.....	4,521	19,886	5,148	2,576	3,472	1,929	5,854	1,652
Reprints.....	3,727	5,048	3,292	2,342	2,937	2,894	2,700	1,960
Forwarded:								
Chart reports.....	2	27	9	6	5	0	6	0
Current reports.....	7	1,889	39	206	65	6	334	94
Deep-sea soundings.....	2	102	0	3	0	2	7	1
Icebergs or field ice.....	122	64	33	21	6	0	0	0
Oil, use of.....	2	14	4	4	4	1	11	1
Port facilities.....	8	285	12	14	13	4	30	12
Route reports.....	3	34	14	13	30	6	15	1
Wrecks or derelicts.....	51	483	312	17	21	10	54	34
Unclassified reports.....	43	1,415	899	233	1,510	74	114	31
Other work:								
Acknowledgments (Form 24).....	202	1,636	136	525	64	38	381	158
Letters written.....	128	492	567	206	307	102	427	71
Letters, circular or stock.....	25	1,039	785	317	162	474	1,410	178
Time ball dropped.....	286	(a)	302	299	297	285	65	302
Vessels visited.....	456	4,004	411	1,014	3,191	35	30	126
Visitors received.....	827	1,914	825	1,852	2,767	474	1,906	219

Character of work.	Pacific coast.				Great Lakes.				Total.
	San Fran- cisco.	Port- land.	Port Town- send.	Du- luth.	S. Ste. Marie (Smo.).	Chi- cago.	Cleve- land.	Bu- falo.	
Distributed:									
Bulletins, Hydrographic.....	2,267	1,307	1,354	1,515	836	1,980	2,116	687	108,017
Daily Memorandums.....	192	1,124	317	300	250	279	.....	20	10,777
Day Marks (L. H. B.).....	213	104	142	108	26	182	109	39	3,571
Notices to Mariners.....	65,189	15,324	64,970	47,852	11,459	66,870	45,820	31,343	661,128
Pamphlets (not H. O.).....	123	66	(a)	203	37	130	111	0	6,202
Pilot Charts.....	8,114	2,559	4,232	1,480	266	2,998	4,835	1,000	70,522
Reprints.....	4,747	1,146	1,732	3,146	1,686	3,473	5,561	850	47,241
Forwarded:									
Chart reports.....	4	16	25	9	0	0	3	1	113
Current reports.....	154	114	51	(b)	(b)	(b)	(b)	(b)	2,959
Deep-sea soundings.....	0	0	0	(b)	(b)	(b)	(b)	(b)	117
Icebergs or field ice.....	27	7	33	(b)	0	(b)	(b)	(b)	313
Oil, use of.....	5	0	4	1	0	8	18	0	77
Port facilities.....	69	20	31	18	11	42	41	3	613
Route reports.....	5	102	39	(b)	1	(b)	(b)	(b)	263
Wrecks or derelicts.....	29	28	103	10	4	2	34	5	1,197
Unclassified reports.....	473	422	447	281	58	70	660	26	6,756
Other work:									
Acknowledgments (Form 24).....	478	129	223	120	0	114	0	0	4,294
Letters written.....	917	600	5,858	485	308	540	777	214	11,959
Letters, circular or stock.....	2,682	625	0	1,186	27	1,054	3,971	691	14,626
Time ball dropped.....	300	212	(c)	302	98	269	285	297	3,679
Vessels visited.....	477	167	108	97	0	26	65	76	10,283
Visitors received.....	2,614	587	345	2,244	192	5,769	1,881	1,197	25,613
Telephone calls.....						4,222	4,103		

a Signifies that no report was made.

b No report obtainable.

c No ball.

E.

SUMMARY OF THE REPORT OF THE WORK OF THE MAIN OFFICE FOR THE FISCAL YEAR
ENDING JUNE 30, 1910.

Appropriation.	Appropriated.	Expended.
Hydrographic Office:		
Salaries.....	\$102,200.00	\$100,636.51
Contingent and miscellaneous expenses.....	\$7,000.00	
Received from sales.....	6,184.04	
Total.....	13,184.04	* 12,636.37
Pilot Chart, North Pacific Ocean.....	2,000.00	1,949.55
Public printing and binding.....	25,000.00	
Expenditures in detail—		
Notice to Mariners.....	\$10,000.00	
2,500 copies Index to Notice to Mariners.....	404.46	
Hydrographic Bulletin.....	1,600.00	
500 copies Hydrographic Office publication No. 127, Star Identification Tables.....	2,450.16	
500 copies Asiatic Pilot, Vol. I.....	827.27	
500 copies Asiatic Pilot, Vol. II.....	1,368.30	
500 copies Asiatic Pilot, Vol. III.....	1,705.97	
1,000 copies Hydrographic Office publication, No. 9, American Practical Navigator.....	1,259.61	
Reprints of Hydrographic Information.....	1,129.00	
Miscellaneous.....	2,971.95	
Total.....		23,716.72
Contingent expenses, Navy Department (allotted).....	140.00	139.57
Branch hydrographic offices:		
Contingent expenses.....	11,000.00	* 8,419.40
Services, necessary employees.....	17,900.00	17,934.66
Total.....	171,484.04	165,432.78

* Estimated.

Sale of Hydrographic Office publications.—Bills made and accounts kept for 60 agents and the general public.

Vouchers and requisitions handled.—1,000 sets of vouchers; 250 sets of requisitions.

Correspondence.—Received 18,000 letters, 1,000 books and pamphlets; sent, 6,000 letters.

REPORT OF THE CHIEF OF THE BUREAU OF ORDNANCE.

DEPARTMENT OF THE NAVY,
BUREAU OF ORDNANCE,
Washington, D. C., October 1, 1910.

SIR: In compliance with the department's circular letter of July 28, 1910, to the chiefs of bureaus and offices, I have the honor to submit the following report of the operations of this bureau for the fiscal year ending June 30, 1910:

These operations have covered a wide range. The demands of the fleet, which it is the aim of the bureau not only to meet but as far as possible to anticipate, have included, besides the routine supplies of ammunition and other stores, new and improved designs for mounts, sights, rammers, ammunition hoists, fire-control instruments, and similar material; while the plans for the battle ships decided upon under the new building programme have called for larger guns and heavier turrets, with their complicated fittings, requiring in many cases new designs to meet the necessity for securing the maximum of efficiency with a minimum of weight and space. Coincidentally with the above has been carried forward the experimental development of new material for armor, projectiles, powders, high explosives, and fuses, the investigation of ballistics, erosion, and a great variety of other subjects the importance of which increases with every increase in the power of ordnance such as results inevitably from the steady progress in the size and power of ships.

The 12-inch 45-caliber gun, with which the ships of the *Connecticut* class are armed, and which was at least as powerful as any gun afloat in the world when it was installed on those ships, has been succeeded by the 12-inch 50-caliber for the *Arkansas* and *Wyoming*, the first tests of which were mentioned in the bureau's report of last year.

Believing that still further advances might be called for in the near future, the bureau, as noted also in last year's report, prepared designs for a 14-inch gun and proceeded with the construction of a type gun. This gun has been completed and tested with gratifying success, the velocity and energy which were contemplated in the design having been obtained with very moderate powder pressures. The tests of this caliber had but just been completed when the question arose of adopting it for the armament of the new battle ships to be laid down this year. The bureau thus found itself in the very gratifying position of having completed the design, manufacture, and test of this weapon, the most powerful yet proposed for use afloat, in advance of the authorization of the ships which will be the first to carry it.

In the matter of powders there have been no changes of importance during the year. The efforts of the powder factory and of the powder board are constantly directed toward the improvement of the quality of the present output, chiefly by narrowing the tolerances at all stages of manufacture where irregularities still exist; the points aimed at being, first, to insure the chemical stability of the powder for as long a period as possible, and second, to secure a degree of uniformity which will insure what may be called the "ballistic stability" of the powder—that is to say, the permanence of velocities and pressures throughout prolonged periods and under varying conditions of temperature, moisture, etc.

The new "stabilizer," which was mentioned last year as having been introduced to guarantee chemical stability, continues to give satisfactory results, and must doubtless be regarded as a permanent factor in our formula.

The reworking plant at the powder factory, by which old powders are broken down and reworked, the stabilizer being added in the process, has been considerably enlarged and is giving very satisfactory results, enabling the bureau to restore powders which have been withdrawn from service to a condition of stability equal to that of new powders, and this at a cost which is less than 35 per cent of that of new powders.

The conditions and outlook with regard to armor-piercing projectiles have materially improved during the year, and there is reason to believe that this matter, which has been mentioned in several previous reports of the bureau as in a very unsatisfactory condition, will reach a solution within the near future, and this without any recession on the part of the bureau from its insistence upon the highest standard of which we have any knowledge.

The advance in armor has not been entirely satisfactory so far as thick plates are concerned. New methods which have been introduced by some of the manufacturers, while giving promise of ultimate improvement, have failed to lend themselves to certain of the processes necessary for the installation of the armor on shipboard. In the meantime the older processes are to some extent being left behind by the improvements in projectiles. It is not entirely clear at present in what direction the next step will lead, but the bureau has no thought of making any concession which will result in lowering its standard.

So far as thin plates are concerned, there has been very marked improvement, and as this improvement, which seemed at one time likely to stop at plates about 2 inches thick, has gradually been extended to 4 inches and in some experimental plates even higher than this, it is possible that the problems which have been referred to as existing with thick plates will find their solution in the further extension of the alloys and the treatment which have given such satisfactory results with thin plates.

The most important improvement in connection with fire control is the development of a new range finder having many points of marked superiority to any other instrument of the kind with which the bureau is familiar. It seems evident that a perfectly satisfactory solution of the problems of fire control must depend initially upon the development of a range finder approaching as closely as possible to the ideal, the determination of range by such an instrument to be

associated with similar ideal conditions of uniformity in the performance of powder; and while these ideal conditions are doubtless still far from attainment, it is believed that the past year has seen a marked advance toward them along both of the lines here referred to.

In connection with the plans for the most recent battle ships, including those to be laid down this year, new designs have been called for in the case of ammunition hoists, rammers, and other loading and handling materials, necessitating at some points radical departures from old designs. These have, in the main, originated in the drafting room of the gun factory and have been, or will be, tried out in the shops to test the perfection of details, before being installed in the ships.

In smaller but hardly less important points, such as sights, breech and firing mechanisms, fuses, primers, etc., a large amount of work has been accomplished by the officers of the bureau and the gun factory which, while not of a character to attract attention, makes quite as great a demand upon the time and the inventive skill of the officers concerned, as do the larger matters which have been referred to above. The improvement in sights has been especially notable in connection with both turret and broadside guns.

A large amount of work has been done in overhauling and modernizing the ordnance of the older ships, beginning with the *Indiana* class and coming down to and including the *Missouri* class. This work is still in progress and will be continued as rapidly as appropriations permit.

New mounts have been designed for guns of the intermediate and torpedo-defense batteries, the changes from earlier designs looking largely to ease and smoothness of elevating and training as contributing to rapidity and accuracy of fire.

As regards torpedoes, the situation has continued to improve throughout the year. The factory at Newport is being gradually enlarged, and with the other sources of supply which are available will soon be in condition to meet all demands. Improvements are being attempted in several important directions with gratifying prospects of success.

A programme of experimental work under the item of \$100,000 included in the appropriation bill for 1910 was prepared by the special board on naval ordnance, but its execution was delayed by difficulties incident to the limitations connected with the situation and surroundings of the proving ground. This station, while very conveniently situated for the work of a proving ground in the most restricted sense of the term—the actual proving of guns, powders, armor plates, projectiles, etc.—is altogether unfit for an “experimental station.” The range which it commands down the Potomac River runs for a number of miles close to the Maryland shore and cuts the Virginia shore at a distance which would be within the danger zone for much of the firing which is needed in the experimental work connected with the high-powered guns of the present day. The conditions are especially dangerous where long-range firing is called for with high-explosive projectiles. The result of these conditions has been to tie the hands of the bureau in the matter of nearly all experimental work, except that which can be done

within the narrow confines of the proving ground itself or by such firings down the range as can be kept within the narrow limits allowed by the conditions above described.

In planning the experimental programme permitted by the sum allotted to such work in the appropriation bill of 1910 a departure was made, which, if it can be extended in the direction desired by the bureau, will open up a wide and very important field of experimental activity, in addition to relieving the proving ground of a mass of work which has been heretofore carried out there in spite of great difficulty and not a little danger. This departure consists in the employment of the monitor *Tallahassee* as an experimental ship, in association with the condemned ram *Katahdin* as a floating platform for the erection of such targets, armored or not, as may be needed for the tests to be made.

The combination of these two vessels will give great flexibility, permitting a wide range in the choice of the location to be selected for any individual test, and will in many ways be superior to the plan at one time proposed, of establishing an experimental station on shore.

The following is a more detailed statement of the work accomplished, arranged under appropriate headings:

GUNS.

The batteries for the *Florida* and *Utah* are completed and partly installed. The 12-inch guns are of 45 calibers and have been assigned a muzzle velocity of 2,850 foot-seconds. The 5-inch guns will have a muzzle velocity of 3,150 foot-seconds, with a 50-pound projectile.

The batteries for the *Arkansas* and *Wyoming* are under construction. The 12-inch guns are of 50 caliber and have been assigned a muzzle velocity of 2,900 foot-seconds. The 5-inch guns will have the same velocity as those of the *Florida* and *Utah*.

The batteries for the new battle ships, Nos. 34 and 35, recently authorized, will consist of ten 14-inch 45-caliber guns and twenty-one 5-inch guns. Comparative firings between the 14-inch 45-caliber and the 12-inch 50-caliber at Indian Head, indicate that the accuracy of the 14-inch is somewhat greater than that of the 12-inch. The 5-inch guns to be installed on these ships will be similar to those in the *Arkansas* and *Wyoming*, but with more efficient breech mechanism.

The work of lining and modifying 12-inch Mark III guns is progressing. Two of these modified guns have been installed in the *Tallahassee*. Others are ready and will be installed in ships of the *Missouri* and *Virginia* classes as soon as the ships are available for a sufficient length of time. The guns returned from these ships will be hooped to the muzzle and retained as spare guns.

New Mark VI 8-inch guns have been installed in the armored cruisers of the *Maryland* class with the exception of the *South Dakota*, the guns for which vessel are ready and will be installed at the first opportunity. The Mark V guns returned from vessels of this class will be hooped to the muzzle and lined. These guns will then be kept as a reserve for the 8-inch Mark VI guns.

Batteries for destroyers 22 to 31 have been completed, and those for destroyers 32 to 36 are under construction. All of these guns

have a longer recoil than the preceding types and have the vertical sliding wedge semiautomatic breech mechanism.

Three-pounder and 6-pounder guns are being gradually removed from the larger ships and replaced where possible with 3-inch.

A number of vessels of the Naval Reserve have been fitted with 3-pounder semiautomatic guns and mounts, and also with 4-inch 40-caliber guns with modern mounts and sights. It is the intention to hold competitive target practice between these ships.

The 3-inch Mark III, model 3, guns of the *Connecticut*, *Louisiana*, *Kansas*, and *Minnesota* have been removed and replaced with Mark V and Mark VI semiautomatic guns. The guns removed are to be fitted with new breech mechanisms of the eccentric plug type, giving greater safety from accidental discharge.

Breech mechanisms.—New types of breech mechanism are being developed for the 14-inch gun and the 5-inch cartridge-case gun. A carrier type of breech mechanism has been developed for the 8-inch guns and is soon to be tested. The eccentric plug type of breech mechanism will probably be installed in cartridge-case guns to be built in the future.

The subject of erosion is being investigated, and considerable additional data has been secured during the year.

The subject of heat cracks is receiving attention, and to limit the possibly injurious effects of these, a liner has been adopted for the 12-inch 50-caliber guns, as a feature of the original construction of the guns.

TURRET MOUNTS.

The preliminary design of a turret mount for guns of larger caliber than those being supplied the vessels then under construction was completed by the bureau in November, 1908. This design was considerably modified after it was finally decided to furnish the battle ships whose construction was recommended in the building programme for the year with larger caliber turret guns than heretofore. The original design was not essentially different from the actual mounts of the period, the principal modifications being in the deck lugs and pointer's sights. Formerly the deck lugs were single castings; the new type deck lugs will be divided. This arrangement permits the employment of a type pointer's sight without hoods. The new sight will, it is believed, be greatly more efficient than any hitherto furnished.

The ammunition handling arrangements for the turrets of the battle ships authorized during the year, as originally laid down, are similar in type to those of the *Wyoming* and *Arkansas*. Consideration is now being given to special type shell hoists for the new vessels.

The turret ordnance for the *Wyoming* and *Arkansas* is being delivered in season to meet the shipbuilders' requirements.

It was originally intended to fit the *Wyoming* and *Arkansas* turrets with two-stage ammunition hoists, adapted to a variable loading position at the guns, of the same type as those fitted to the turrets of the *Florida* and *Utah*. Later, in view of the very great success with manual ammunition handling and loading arrangements of the 12-inch turrets of the *Louisiana* and *Vermont*, it was decided to adopt

somewhat similar ammunition handling and loading arrangements for the turrets of the *Wyoming* and *Arkansas*. Accordingly, these turrets will have a hand powder supply all the way from the magazines to the guns. A considerable number of shells will be stowed in the gun chambers and immediately underneath them in the upper handling room, and the remainder of the allowance in the regular shell rooms. The supply of shells in the gun chambers may be replenished by either hand or power appliances, or by both. The gun chambers will be effectually sealed from the handling rooms at all times. It is contemplated that shells will ordinarily be seated in the guns by hand rammers, but power rammers will be provided. The above briefly described ammunition handling arrangements greatly reduce the amount of apparatus, especially of electrical apparatus, in the turrets.

The turret ordnance for the *Florida* and *Utah* has been supplied without any interruption to cause delay to the shipbuilders. Practically all of this material has now been delivered.

The turret installations of the *Delaware* and *North Dakota* were completed during the year and given very thorough operative tests, through which they passed successfully. The ammunition hoists, of the two-stage type, for these vessels, were designed and furnished by a private firm and are somewhat complicated; their relative efficiency can not be established until after further service trial.

The ordnance apparatus of the turrets of the *South Carolina* and *Michigan* has proved to be very satisfactory in service. Both of these vessels made excellent scores with their turret guns at the first target practice which followed their going into commission—three months in the case of the *South Carolina* and three and one-half months for the *Michigan*. In view of the short periods of training allowed, the performance of the turret ordnance of these vessels is particularly gratifying.

Under the appropriation for modernizing turret-gun elevating gears, which became available at the beginning of the year, the necessary special type hydraulic controllers, to the number of 204, have been contracted for and about 60 per cent of them delivered. The turret-gun elevating gears of all vessels in commission, not previously supplied with the most modern controllers, except the armored cruisers of the *Colorado* class (6 vessels) and the *Montana* and *North Carolina*, have been overhauled and fitted with efficient control systems. Practically all turret guns of vessels in commission are therefore now supplied with the best elevating gear it is at present possible to give them. The vessels not yet fitted with new controllers will be supplied with them as soon as it is possible for the contractors to make deliveries. These changes should result in a considerable increase in the gunnery efficiency of the fleet.

Of the vessels out of commission, the turret ordnance repair work of the *Indiana* and *Iowa* was completed during the year. The turret ordnance of the *Kearsarge*, *Kentucky*, *Alabama*, *Illinois*, *Wisconsin*, *Maine*, *Missouri*, and *Ohio* is now being extensively overhauled. This work consists principally in realigning the pair of guns so as to make them parallel to each other, fitting port protection to close the ports, renovating the elevating gears and fitting them with new type controllers, modernizing the sights, and supplying improved type am-

munition hoisting and loading arrangements; for the last two items an appropriation of \$564,000 is available, and this amount should cover the work.

The ordnance repairs to the turrets of the *Oregon* have progressed slowly during the year. According to the present estimate, this work will not be completed before about March 1, 1911.

New sights have been supplied to the turrets of the *Monterey*, *Monadnock*, and of the four monitors of the *Ozark* class.

It is particularly gratifying to record that the casualties to turret ordnance material during the year have been very few, and those of a minor character.

POWDER.

There has been no change in the composition of service powder during the year, but better and more uniform methods of manufacture and inspection have resulted in an improvement in the product, especially as regards uniformity at different plants.

The facilities for a rapid output in case of necessity—a matter which would be of vital importance in time of war—have steadily improved. At the same time the reserve supply has been increased, and the outlook in this matter is altogether satisfactory. The reworking plant at Indian Head is effecting great economies in transforming defective powder, which a few years ago would have been a total loss, into material which is fully equal to the best of the new product.

Cooling systems for magazines are being installed in new ships, with a view to prolonging the life of the powder and keeping the ballistics uniform, and similar systems will be installed in the older ships as rapidly as possible. The bad effects of unfavorable conditions of heat and moisture upon the stability of powder have engaged the attention of the bureau, and special efforts are being made to counteract these effects by care in the manufacture of containers and in the design and care of magazines.

PROJECTILES.

A form of projectile has been adopted which is found to give considerably greater range than has hitherto been attained, together with a marked increase in striking velocity and penetration, especially at long ranges.

There has been a marked improvement in the quality of armor-piercing projectiles supplied by certain of the firms with which the bureau has contracts, and the outlook in this direction is more satisfactory than for several years past. It must be remembered, however, that the manufacture of armor-piercing projectiles of large caliber and of the quality demanded by the bureau's specifications is necessarily slow, and the lack of an adequate supply of perfectly satisfactory projectiles continues to be a matter of serious concern.

AMMUNITION SHIPS.

The bureau is constrained to urge upon the department once more the importance of providing one or more properly equipped ships for the transportation of ammunition. The importance of such

ships in case of war is probably fully recognized, but quite apart from this paramount consideration is the urgent demand for at least one such ship for dealing with ammunition, especially powder, in time of peace. There is no more important duty devolving upon the bureau than that of watching constantly the various lots of powder carried by ships in service and withdrawing these as soon as any suspicion is thrown upon their stability. Yet the bureau is constantly hampered in this work by the lack of a ship available at short notice and properly equipped for receiving and transporting such powders with the special precautions which are appropriate to the situation, and replacing them by newer powders so promptly that the military efficiency of the ship will not be compromised. The makeshift arrangement at present in use, under which the bureau is reduced to the necessity of delaying such changes until a collier or a supply ship can be spared from other duty, and then of utilizing any space on board which may be available, is not only inconvenient but extremely dangerous. This point is illustrated by a recent incident in which the *Culgoa*, an old merchant vessel transformed into a supply ship, was transporting something like 100,000 pounds of smokeless powder in a compartment which contained also a large quantity of gasoline, when a quantity of the powder in a lighter alongside took fire and burned with the rapidity and the intense heat which are characteristic of smokeless powder. The *Culgoa* was saved from taking fire by the narrowest possible margin, but it is not difficult to imagine what the result would have been had the fire spread, as there was every reason to suppose that it would spread, to the powder and gasoline stowed together in one compartment of the ship.

It is earnestly recommended that Congress be urged to include in the next appropriation bill a provision for one ammunition ship for use on this coast.

ARMOR.

Contracts were awarded during the year for 12,984 tons of armor plate and appurtenances for battle ships 32 and 33, *Wyoming* and *Arkansas*, the armor having been allotted in practically equal proportions to the Carnegie Steel Company, the Bethlehem Steel Company, and the Midvale Steel Company.

The price paid for class A armor, which comprised 90 per cent of the total, was \$420 per ton.

The prices paid for the other classes are as follows: Class B, \$415; class C, \$460; class D (hollow forgings), \$587; class E (bolts and nuts), \$508. As in previous contracts, the Government is exempt from any claims for royalties, etc.

Class C armor, which consists of thin plates, such as turret and conning-tower tops, is made of special-treatment steel, which is much more efficient than anything heretofore used for this purpose.

The total amount of armor delivered during the year was 10,791 tons, and there remained to be delivered on July 1 about 10,000 tons, of which 431 tons belong to the contract of June 14, 1909, and the remainder to the contract of September 10, 13, and 27, 1909.

Extensive experiments have been conducted during the year, having in view the improvement of armor.

SMALL ARMS, MACHINE GUNS, ETC.

A new type of 3-inch naval landing gun has been adopted. This gun has a long recoil and sliding breech plug, these features increasing the steadiness of the gun and field carriage and reducing the possibilities of a premature explosion, respectively. Contract has been made for 25 of these guns, and they will be placed on board the new battle ships, commencing with the *Michigan* class. It is hoped that an appropriation will be made by the next Congress to equip all vessels in commission with this gun.

A sufficient number of the model 1903, 30-caliber Springfield rifle, with accouterments and ammunition for same to equip the battle ships and armored cruisers in commission have been purchased. The last Congress appropriated \$150,000, which is available for the purchase of more rifles and machine guns, and it is expected that all vessels will be equipped with this improved rifle within the next two years.

The Benet-Mercie machine gun, officially designated as "Automatic Machine Rifle, Caliber .30, Model 1909," has been adopted, and contract is now pending for 100 of these guns, which will be placed on new vessels, beginning with the *Michigan* class, and on destroyers Nos. 17 to 42, inclusive.

TRAINING OF PERSONNEL.

Marked advance has been made in gun-pointer training devices consisting of subcaliber attachment and improved dotters. On many ships the Morris tube, with its accompanying dangers of accidents to the personnel, has been replaced by improved dotters, and it is intended that eventually Morris tubes shall be completely eliminated.

TORPEDOES.

The torpedo situation has steadily improved throughout the year. Deliveries of torpedoes on existing contracts are being made as rapidly as the conditions of manufacture will permit. During the year all the battle ships, armored cruisers, and scout cruisers of the Atlantic Fleet have been supplied with 75 per cent of their full allowance of torpedoes of recent design.

The first elementary target practice held by the fleet as a whole with these torpedoes was most satisfactory.

Destroyers, torpedo boats, and submarines have been supplied with their full allowance.

The *Montgomery* has been engaged throughout the year in experimenting with various types of torpedoes, and much valuable information has resulted from this experimental work.

The *Vesuvius* has been overhauled and stationed at the torpedo station, and is now on the range actively engaged in testing out new torpedoes as they are delivered.

The work of experimental firing with submarines at the torpedo station, which was carried on last year, has been continued during the present summer, with excellent results.

MINES.

The bureau has taken steps to provide 100 additional harbor-defense mines of the same type as those completed last year.

TORPEDO STATION ON PACIFIC COAST.

An appropriation was provided by Congress during the last year for purchasing the necessary land and for the initial improvements for a torpedo repair station on the Pacific coast. Plans have been prepared for this station and the necessary steps taken to acquire land, on which work will be begun at the earliest opportunity after transfer of titles to the Government.

FIRE-CONTROL INSTRUMENTS.

New types of fire-control instruments at present under manufacture for issue to ships building are believed to represent a distinct improvement upon those previously in use.

RANGE FINDERS.

The bureau has begun the issue to service of the new type of range finder described in last year's annual report. This is a marked improvement upon the types heretofore in use and seems to be giving very satisfactory results on shipboard.

SPECIAL BOARD ON NAVAL ORDNANCE.

This board has continued to act in an advisory capacity to the bureau in many important matters and has outlined and supervised all important experimental work. During the autumn of 1909 a program of experiments was prepared in which armor plates were to be erected upon the deck of the condemned ram *Katahdin* to be fired at from the proving ground at long range, with a view to clearing up certain questions of ballistics which have been matters of dispute. Owing to various causes with which the department is familiar, these tests were delayed until June, 1909. The difficulties which were encountered in carrying out the first part of the program have been referred to in the early part of this report, as inherent in the situation of the proving ground, and led to the plan, which has also been referred to, of utilizing the *Tallahassee* and the *Katahdin* together for work of this general character.

A new program has been prepared by the special board, based upon the use of the *Tallahassee* and the *Katahdin* as firing ship and target platform, respectively, and including the special tests called for by the current appropriation bill.

In addition to the experiments above referred to, the work of the special board has included important lines of study and experiment which it is not considered best to refer to in this report.

INADEQUATE OFFICE FACILITIES.

The unfavorable surroundings both for work and for health resulting from the crowded conditions of the very restricted space allotted to this bureau are again called to the attention of the department. If this matter were a question alone of comfort or convenience, the conditions might be accepted without complaint; but the eyesight and the general health of the officers and employees concerned are

matters with regard to which the bureau feels that it has a responsibility which can not be ignored; and the delay and possible errors resulting from the handling, in such cramped and crowded quarters, of the great volume of business passing through this bureau, is a matter even more serious, especially when the nature of the matters dealt with by the bureau is considered.

NAVAL GUN FACTORY.

The work of this establishment has progressed satisfactorily and has included the usual wide range, from the design and manufacture of turret guns and mounts to repairs upon the most minute parts of relatively unimportant mechanisms; all, however, being directed toward a single end—the battle efficiency of the fleet.

On April 1, 1910, Rear-Admiral E. H. C. Leutze, U. S. Navy (retired), was succeeded as commandant of the navy-yard and superintendent of the Gun Factory by Capt. F. E. Beatty.

The following brief summary gives, perhaps, a more graphic idea of the work of the factory than could be given by a more detailed statement:

Guns of all callbers:	
Completed	187
Partially completed.....	202
Rebuilt	16
Mounts and principal parts of mounts and other large fittings for recent battle ships	971
Miscellaneous parts and fittings of considerable size, approximately	50,000
Forgings	125,000
Large caliber shells, banded.....	2,484
Shipments, aggregate weight.....pounds.....	10,411,401
Expenditures, labor and material.....	\$7,900,317.73

The following extracts from the report of the superintendent of the Gun Factory cover the improvements made during the year and those recommended. It will be observed that the improvements recommended are limited to those urgently needed. The bureau concurs in the opinion of the superintendent with regard to the importance of these items.

IMPROVEMENTS ACCOMPLISHED AND NEW MACHINERY INSTALLED.

During the past year there have been many worn-out machines in the different shops surveyed and appraised and replaced by modern up-to-date machines. There are still some old machines that should be replaced from time to time. The most important of these are two planing machines and one large boring mill which have been required but not yet delivered.

The last two old boilers, the coal pockets, and the coal-handling machinery in the old boiler house in the quadrangle have been surveyed, appraised, sold, and removed, and in this building there has been installed an oxy acetylene cutting and welding plant which has proved to be a valuable addition to the Gun Factory, and since its installation several months ago its first cost has practically been saved. There are also employed in this building, which has been fitted up as a small shop, the boiler makers and men employed on structural steel work for ammunition hoists, etc., and it makes a very satisfactory and suitable place for this kind of work. The removal of the smokestack recently has given a lot of extra floor space which was needed very much. Drawings have been prepared for the extension of this building, putting in an overhead crane, etc., which will be referred to in the latter portion of this report. The improvements desired are very much needed and will make this shop complete for boiler and ammunition hoist work, etc.

In the foundry there has been installed a new annealing furnace for annealing steel castings, using fuel oil. This furnace works very satisfactorily and it means a great saving in time and cost. It will probably be necessary to install another furnace similar to this one in the course of the next year to replace an old one in which is now being used soft coal as fuel.

Some important changes are now being made in connection with the boiler house. It is proposed to utilize the water from the condensers in the power house. This water is to be discharged into a hot well and then pumped into the feed-water heater and through the economizers. This process will bring the temperature of the water upon entering the boilers up to from 200° to 250°. By this means it is hoped to save at least 10 per cent on the fuel. The Gun Factory is now using about 40,000 tons of buckwheat coal per annum, and a saving of 10 per cent would mean about \$11,200 on the fuel. The cost of the feed-water heaters will be about \$2,500, and the necessary changes will probably cost about \$1,000.

The pneumatic-power plant is inadequate for present requirements and it will be necessary to install at least one more 2,500-foot air compressor in the near future.

Great improvements have been made in the gun shop by raising the roof of the south end of the north gun shop and installing therein an 80-ton crane and also remodeling the 110-ton crane to accommodate and facilitate the handling and assembling of 14-inch 45-caliber and 12-inch 50-caliber guns. Large gun lathes Nos. 2 and 3 were lengthened to permit the boring of these longer guns, and lathes Nos. 6 and 7 were extended to handle the turning of shrinkage and screw-box work of 12-inch 50-caliber and 14-inch 50-caliber guns. Eight 15-horsepower motors have also been installed.

In the breech-mechanism shop there have been installed two Pratt & Whitney geared head 6-foot engine lathes, swing 16 inches, 36 inches between centers; two Hendey-Norton geared head 7-foot engine lathes, 18-inch swing, 39 inches between centers; two Johnson 14-foot engine lathes, swing 36 inches, 7 feet between centers; one Pratt & Whitney new model turret lathe, 1½ by 18 inches; one 32-inch stroke pillar shaper; one 26-inch stroke transverse shaper; one 20-inch stroke pillar shaper; one 15-inch bevel gear shaper; and one water tool grinder.

A No. 2 milling machine has been installed in the sight shop, and in the cartridge-case shop two Cleveland new automatic 2½-inch turret machines.

The congestion in the pattern loft has been relieved to some extent by surveying and destroying obsolete patterns and rearranging those necessary to be kept. The present building is inadequate and something should be done to enlarge it in order that sufficient space may be had for storing and arranging serviceable patterns. A great deal of time and expense would be saved by having a better arrangement than there is at present.

The fourth electric vehicle (2,500-pound wagon of special design), built by the Studebaker Company, has been received and put into commission. This wagon has proved to be very useful, particularly in making payments to the men in the shops by the pay department. Its use has resulted in a great saving financially.

Two electric hoists have been placed in the metal-saw shop, which materially facilitate handling castings sent there to have gates and fins sawed off.

In the erecting shop there have been installed one double-end punching and shearing machine; one vertical high-power milling machine; and two adjustable crank-shaping machines, 24 by 16 inches.

There has been added to the tool shop one vertical high-power milling machine.

One 30-inch vertical drilling machine has been installed in the seamen's shop. In the west gun-carriage shop there have been installed one spline milling machine; one No. 5 vertical spindle milling machine; one No. 2 die-sinking machine; two Pratt & Whitney engine lathes; one automatic bevel-gear planer; one 15-inch crank slotting machine; one 24 by 24 inch by 10 foot standard planer; one 10-inch crank slotting machine; and one 6-foot standard radial drilling machine.

IMPROVEMENTS RECOMMENDED.

The difficulty in obtaining the many needed additions in the way of shop and machinery appliances for the Gun Factory as requested in the estimates heretofore submitted, is apparent. The bureau being thoroughly familiar with this subject, it is hardly necessary to say anything further. There are some

Improvements, however, that are most urgently needed, and for which the necessary funds from Congress to obtain the same should be gotten. Recognizing the futility of getting a number of items, although they may be essentially necessary, I fully agree with my predecessor that it would be better to confine my recommendations for improvements to those items considered absolutely necessary to make the Gun Factory self-contained as nearly as possible, particularly in time of war.

I would respectfully refer to Naval Gun Factory letters Nos. 14415/4 of May 24, 14415/5 of July 14, and 14415/6 of July 28, 1910, submitting annual estimates for the fiscal year ending June 30, 1912.

(a) For the purchase and erection of new and improved machinery
for existing shops----- \$125,000

It is necessary that this amount should be obtained for the purpose stated. The continued working in shifts in all the shops resulting in the constant wear and tear on the present machinery makes it necessary to have at least this amount in order that a reasonable standard of efficiency may be kept up. The appropriation for the present fiscal year was \$150,000; a reduction of \$25,000 has been made in the estimates for the next fiscal year.

(b) Machinery, cupolas, furnaces, etc., for proposed new foundry---- \$121,075

The necessities for a new and modern foundry and machinery for the same were fully explained in the estimates and reports for the four preceding fiscal years. I can but reiterate those reasons. The present foundry is antiquated and entirely inadequate in size and unsuitable as a foundry for such an institution as the Naval Gun Factory. It is a menace to the health of the employees and also the officers residing in the yard on account of its present situation. The loss to the Government every year by not having better facilities in this regard would soon equal the amount requested to properly provide for this portion of the Gun Factory, and its increased products would materially aid in the output of the armament from its shops, saving both time and expense. Of all the improvements recommended, it is the most seriously needed, and it is again urged that every effort be made to procure a suitable appropriation for the starting of this much needed improvement. At present, in case of hostile emergency, the requirements of the Gun Factory could not be met, either by any foundries owned by the Government or by manufacturers on the outside, and the Government would be seriously embarrassed by not having suitable facilities for getting out foundry work. It would not be necessary to make an appropriation for the entire amount for a new foundry at the present time, as it would require about two years to build and properly equip it, therefore a substantial appropriation to begin this work would suffice for the present.

(c) Extension of old boiler house, building No. 109, and installation
therein of a 10-ton overhead electric traveling crane, 3 motors----- \$4,000

It is very desirable and necessary that the old boiler house, building No. 109, be extended for use as a structural steel and boiler shop. As before stated, it is proposed to install therein an electric crane and runway. The proximity of this building to the pneumatic plant makes it especially desirable, with the modifications proposed, for use in assembling structural steel work, etc. Its convenient location and use, as indicated, would result in a material saving in the handling of material and also cheapen the cost of production on account of its accessibility to the erecting shop and pneumatic plant.

**SPECIAL OR NEW OBJECTS—PUBLIC WORKS—ORDNANCE—IMPROVEMENTS TO BE MADE
BY YARDS AND DOCKS.**

In addition to the improvements recommended in preceding paragraphs, the following, coming under the Bureau of Yards and Docks, are intimately connected with the Gun Factory, and should therefore be recommended by the Bureau of Ordnance:

New foundry and foundry yard----- \$300,170

NOTE.—See remarks pertaining to estimate for machinery for foundry, "Item B."

New flooring in the shops----- \$25,000

It is urged that this item be obtained, as the condition of the floors at present in some of the shops makes it not only inconvenient, but exceedingly dangerous to the men using them. They have had about nineteen years' hard service and are so worn and hollowed in places that when wet after being washed, or greasy from oils, they are very slippery, and accidents are frequently happening to men on this account.

New railroad connections to take the place of the present connection: This matter having been provided for by the recent session of Congress, nothing further is necessary at this time.

For converting new boiler house, building No. 100, and extension for use as a structural steel and boiler shop:

Crane runway, girders, columns, foundations, braces, etc.....	\$9,500
Building extension, including walls, foundation, roof, windows, etc..	11,400

Total.....	20,900
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NOTE.—See remarks pertaining to estimate for 10-ton crane, "Item C."

NAVAL PROVING GROUND, INDIAN HEAD, MD.

The work of this station has been divided, as heretofore, along two general lines which have little in common and which in many ways interfere seriously with each other—the work of a proving ground as such and the work of an ordnance experimental station. Attention has been called in the early pages of this report to the difficulties connected with the conducting of experimental work at this station and to the proposed remedy in the employment of the *Tallahassee* and the *Katahdin*.

The principal items in the work of the station for the past year may be summarized as follows: Guns proved, 244; armor plates tested for acceptance, 92; shells tested, 413 lots; powder tested, 87 lots.

Besides the above, a large number of tests have been made, running up into the hundreds, which do not lend themselves to classification, and a great deal of firing has been done in connection with experimental work along a great variety of lines, of which the following are a few of the most important:

Firings of the 14-inch and 12-inch 50 caliber guns, for proof of guns and to fix the powder charge and determine range, drift, dispersion, etc.

Firings to determine the effect of erosion upon the velocity of a worn gun and to test methods of restoring the velocity to its normal value.

Comparative tests of automatic machine guns for the information of the board appointed to select such a gun for service use.

Firings against experimental armor plates to test various methods, as proposed by the manufacturers, for improving the quality of armor.

Range firings for comparison of the new design of projectile with that previously in use.

Firings in connection with the development and test of high-explosive bursting charges and detonating fuses for projectiles.

Firing at targets on the *Katahdin*, in connection with an experimental programme prepared by the special board on naval ordnance.

POWDER FACTORY.

The output of this plant for the year has been as follows:

	Pounds.
New powder.....	829, 144
Reworked powder.....	831, 542
Total output.....	1, 660, 686

There has been a steady improvement in the quality of the output and in economy of manufacture, aside from which there have been carried forward in the chemical laboratory a number of lines of investigation bearing upon the important question of stability, and looking to the possible development of more satisfactory tests than those at present in use.

The value of the reworking plant is strikingly demonstrated by the fact that more than 8,000,000 pounds of old powder has been reworked at a cost amounting to only about 35 per cent of the cost of new powder. The significance of this fact is that it makes possible a policy by which all inferior powders can be withdrawn from service and reworked, without waiting for definite evidence that they are tending toward conditions of actual instability.

NAVAL TORPEDO STATION, NEWPORT, R. I.

The work of this station has proceeded along two lines, one having to do with the manufacture, test, and issue to service of torpedoes, mines, etc., the other with the development of the plant for the manufacture of torpedoes.

Excellent progress has been made along both of these lines, and, as already noted, the situation as to the present and prospective supply of torpedoes for the service shows a very gratifying improvement over the condition described in previous reports.

THE NAVAL MAGAZINES.

Work at all of the naval magazines has progressed very satisfactorily, and all demands upon them have been met promptly.

The bureau has endeavored to systematize methods of preparing, handling, and issuing ammunition and magazine supplies of all kinds, with a view to economy in cost as well as in the maintenance and upkeep of the stations, and marked improvement has been noted at several of the magazines.

During the year the bureau received authority from the department to place the magazines at Iona Island, N. Y., Dover, N. Y., and Fort Lafayette, N. Y., under one inspector of ordnance, with a view to concentration of the inspection of the work, and the bureau has found this plan to be an improvement over the old system, where there were three officers in charge of the magazines.

Very satisfactory progress has been made on all the buildings or other improvements authorized at the various naval magazines, and the bureau has used every effort consistent with efficiency to expedite all work of this character to meet the ever-increasing demands of the service and to prevent delays or embarrassment in the handling, supply, or storage of ammunition.

The most important work of this character has been the development of the new magazine on the New England coast (Hingham, Mass.). Up to July 1, 1909, 714 acres of land had been acquired, at a total cost of \$160,453.14. From July 1, 1909, to July 1, 1910, there have been acquired 133.79 acres, at a total cost of \$28,742.60. There remains to be acquired 57.7 acres, embraced in 17 different parcels.

The Hingham side of the reservation has been completely fenced in, requiring about 18,000 feet of fence.

The railroad has been satisfactorily completed.

A marine barracks has been completed and is occupied.

Contracts have been awarded for the following buildings: One storehouse, 180 by 50 feet; 1 shell house, 180 by 50 feet; 1 fixed ammunition house, 180 by 50 feet; 3 magazines, each 90 by 50 feet; 1 power house, 150 by 50 feet; quarters for the officer in charge.

Work in connection with the quay wall and basin, the channel, the water supply, the light and power is under way, and promises to be completed when required.

Several of the old houses purchased with the site have been selected for use, one for a gunner, three magazine attendants, and the remainder for employees.

The magazine is about ready for use, and the bureau expects to abandon the naval magazine at Chelsea, Mass., some time during the coming fall, and to transfer all the stores, material, etc., now at that magazine to the new one at Hingham.

Respectfully,

N. E. MASON,

Chief of Bureau of Ordnance.

The honorable the SECRETARY OF THE NAVY.

REPORT OF THE CHIEF OF THE BUREAU OF CONSTRUCTION AND REPAIR.

NAVY DEPARTMENT,
BUREAU OF CONSTRUCTION AND REPAIR,
Washington, D. C., September 30, 1910.

SIR: 1. In accordance with the department's instructions, contained in its letter 27438 of May 1, 1910, I have the honor to submit the report of the bureau for the fiscal year ending June 30, 1910, and estimates for appropriations required for the fiscal year ending June 30, 1912.

2. The estimates marked "A" are for the salaries of the clerical employees of the bureau and are identical with the actual appropriations made by Congress for the fiscal year ending June 30, 1911, except the estimate providing for the salary of the chief clerk, namely, \$2,500, which is an increase of \$500 over the present pay of that employee.

3. The estimates marked "B" are for the construction and repair of vessels at navy-yards and on foreign stations; the purchase of stores, materials, machinery, and tools of all kinds; the construction and repair of yard craft; the pay of the clerical, drafting, inspection, and messenger service in navy-yards, naval stations, and offices of superintending naval constructors; and the performance of all work for the navy in the line of construction and repair. These estimates are identical with the actual appropriation made by Congress for the fiscal year ending June 30, 1911. In connection with these estimates the bureau submitted, in accordance with the department's instructions, revised estimates showing a total of \$10,180,644, these estimates to be used in the event of the abolishment of the Bureau of Equipment. It should be noted that these estimates, as revised, show an increase of \$1,201,500 over the Bureau of Construction and Repair's current appropriations, and this amount was fixed by the department to cover the additional items transferred to this bureau's regular appropriation, which items had previously come under the cognizance of the Bureau of Equipment under appropriation "Equipment of vessels." The bureau's letter 945-A/191 of August 9, 1910, invited the department's attention to the fact that the allotments made in departmental order No. 70 for work under this bureau were not based, so far as the bureau was aware, on actual cost of work allotted to the various bureaus or upon the actual clerical and drafting work involved in the items transferred to such bureaus. From the reports of expenditures and the statement furnished by the Bureau of Supplies and Accounts showing the available balance and expenditures and obligations to September 1, 1910, chargeable to that portion of appropriation "Equipment of vessels, 1911," allotted to this bureau, it would appear that even by exercising the strictest economy in the use of said funds, the amount assigned to this bureau will barely be sufficient to meet expenditures for these items for the balance of the present fiscal year.

4. The estimates marked "C" are for the improvement of the shipbuilding and repair plants at the several navy-yards and naval

stations, it having been found desirable in previous years to include estimates for appropriations of this character which may be specifically devoted to the improvement of the plants. Such a provision is necessary in order that such work may not depend entirely upon allotments from the general appropriations, since casualties in the fleet, which could not be foreseen or estimated for, may make it impossible to utilize any considerable portion of the general appropriation for plant improvements. This estimate is less than that for the fiscal year ending June 30, 1911, to the extent of \$15,000, which is caused by not repeating the estimate of \$15,000 for the improvement of the plant at the navy-yard, Puget Sound, Wash., in view of the balance available for plant improvement at that yard.

5. The estimates marked "D" cover the amounts required by the bureaus of Construction and Repair and Steam Engineering under the appropriation "Increase of the navy;" construction and machinery (including submarine torpedo boats and colliers) for work on new vessels already authorized by Congress. These estimates are less than the amount actually appropriated by Congress for the fiscal year ending June 30, 1911, to the extent of \$15,521,105.33. These estimates for "Increase of the navy, construction, and machinery (including submarine torpedo boats and colliers) for the fiscal year 1912," as has been the case for similar estimates in previous years, do not include any provision for such new vessels as may hereafter be authorized by Congress. For the further information of the department on the subject of appropriations under "Increase of the navy," there is given below a statement of the amounts actually appropriated for "Increase of the navy, construction, and machinery (including submarine torpedo boats and colliers)" for each of the preceding six years and the estimates for the fiscal year 1912, for continuing work on vessels already authorized:

1906.....	\$30,410,833.00
1907.....	18,330,829.00
1908.....	13,213,915.00
1909.....	18,907,962.00
1910.....	25,766,823.00
1911.....	21,805,724.00
1912.....	7,453,619.67

6. Estimates submitted by the bureau for the fiscal year 1911-12:

ESTIMATE A.—Salaries.

Detailed objects of expenditures and explanations.	Estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for current fiscal year ending June 30, 1911.
1 chief clerk, at \$2,500.....	\$2,500.00		
2 clerks of class 4, at \$1,800.....	3,600.00		
2 clerks of class 3, at \$1,000.....	3,200.00		
3 clerks of class 2, at \$1,400.....	4,200.00		
3 clerks of class 1, at \$1,300.....	3,900.00		
3 clerks of class 1, at \$1,200.....	3,600.00		
9 clerks of class E, at \$1,100.....	9,900.00		
15 clerks of class E, at \$1,000.....	15,000.00		
5 copyists, at \$500.....	4,500.00		
2 assistant messengers, at \$720.....	1,440.00		
1 laborer, at \$600.....	600.00		
9 messenger boys, at \$600.....	5,400.00		
1 messenger boy, at \$400.....	400.00		
Total.....		\$58,300.00	\$57,800.00

Statement of persons employed as draftsmen and for other technical purposes, and the compensation paid to each as required by the legislative, executive, and judicial act of June 17, 1910:

	Per diem.	Per annum.	Total.
1 chief draftsman.....	\$10.00	\$3,130.00	\$3,130.00
1 leading draftsman.....	9.00	2,817.00	2,817.00
1 electrical expert aid.....	8.00	2,504.00	2,504.00
1 leading draftsman.....	7.52	2,353.76	2,353.76
2 draftsmen, each.....	7.04	2,203.52	4,407.04
7 draftsmen, each.....	6.45	2,028.24	10,141.20
8 draftsmen, each.....	6.00	1,878.00	13,146.00
2 draftsmen, first class, each.....	5.52	1,727.76	13,822.08
1 assistant electrical expert aid.....	5.04	1,577.52	3,155.04
4 draftsmen, second class, each.....	4.48	1,402.24	5,608.96
7 draftsmen, third class, each.....	3.60	1,252.00	3,764.00
2 draftsmen, fourth class, each.....	3.28	1,026.64	2,253.60
3 assistant draftsmen, first class, each.....	2.80	876.40	3,079.92
1 assistant draftsman, second class.....	2.00	626.00	876.40
1 assistant draftsman, fourth class (vacant).....	2.00	626.00	626.00
Total.....			78,262.52

ESTIMATE B.—Construction and repair of vessels.

Detailed objects of expenditure and explanations.	Estimated amount which will be required for each detailed object of expenditure.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1911.
For preservation and completion of vessels on the stocks and in ordinary; purchase of materials and stores of all kinds; steam steerers, pneumatic steerers, steam capstans, steam windlasses, and all other auxiliaries; labor in navy-yards and on foreign stations; purchase of machinery and tools for use in shops; carrying on work of experimental model tank; designing naval vessels; construction and repair of yard craft, lighters, and barges; wear, tear, and repair of vessels afloat; general care, increase, and protection of the navy in the line of construction and repair; incidental expenses for vessels and navy-yards, inspectors' offices, such as photographing, books, professional magazines, plans, stationery, and instruments for drafting room, and for pay of classified force under the bureau, eight million nine hundred and seventy-nine thousand one hundred and forty-four dollars: <i>Provided</i> , That no part of this sum shall be applied to the repair of any wooden ship when the estimated cost of such repairs, to be appraised by a competent board of naval officers, shall exceed ten per centum of the estimated cost, appraised in like manner, of a new ship of the same size and like material: <i>Provided further</i> , That no part of this sum shall be applied to the repair of any other ship when the estimated cost of such repairs, to be appraised by a competent board of naval officers, shall exceed twenty per centum of the estimated cost, appraised in like manner, of a new ship of the same size and like material: <i>Provided further</i> , That nothing herein contained shall deprive the Secretary of the Navy of the authority to order repairs of ships damaged in foreign waters or on the high seas, so far as may be necessary to bring them home: <i>Provided further</i> , That the sum to be paid out of this appropriation, under the direction of the Secretary of the Navy, for clerical, drafting, inspection, and messenger service in navy-yards, naval stations, and offices of superintending naval constructors, for the fiscal year ending June thirtieth, nineteen hundred and twelve, shall not exceed eight hundred and eight thousand and thirty-nine dollars.....	\$8,979,144.00	.....	\$8,979,144.00
NOTE.—In the event of the abolishment of the Bureau of Equipment the above estimates under appropriation "Construction and repair of vessels, 1912" should be increased to a total of \$10,180,644, and the following substituted for the above text, to provide for the items formerly under "Equipment," but now assigned by the department to the Bureau of Construction and Repair.			

ESTIMATE B.—Construction and repair of vessels—Continued.

Detailed objects of expenditure and explanations.	Estimated amount which will be required for each detailed object of expenditure.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1911.
<p>For the preservation and completion of vessels on the stocks and in ordinary; purchase of materials and stores of all kinds; steam steerers, pneumatic steerers, steam capstans, steam windlasses, and all other auxiliaries; labor in navy-yards and on foreign stations; purchase of machinery and tools for use in shops; carrying on work of experimental model tank; designing naval vessels; construction and repair of yard craft, lighters, and barges; wear, tear, and repair of vessels afloat; general care, increase, and protection of the navy in the line of construction and repair; incidental expenses for vessels and navy-yards, inspectors' offices, such as photographing, books, professional magazines, plans, stationery, and instruments for drafting room, and for pay of classified force under the bureau; for hemp, wire, iron, and other materials for the manufacture of cordage, anchors, cables, galleys, and chains; specifications for purchase thereof shall be so prepared as shall give fair and free competition; canvas for the manufacture of sails, awnings, hammocks, and other work; interior appliances and tools for manufacturing purposes in navy-yards and naval stations; and for the purchase of all other articles of equipage at home and abroad, and for the payment of labor in equipping vessels therewith and manufacture of such articles in the several navy-yards; naval signals and apparatus, other than electric, namely, signals, lights, lanterns, rockets, running lights, lanterns and lamps and their appendages for general use on board ship for illuminating purposes, and oil and candles used in connection therewith; bunting and other materials for making and repairing flags of all kinds; for all permanent galley fittings and equipage; supplying, installing, maintaining, and repairing all conduit and molding and other means for carrying electric wiring; rugs, carpets, curtains, and hangings on board naval vessels, ten million one hundred and eighty thousand six hundred and forty-four dollars: <i>Provided</i>, That no part of this sum shall be applied to the repair of any wooden ship when the estimated cost of such repairs, to be appraised by a competent board of naval officers, shall exceed ten per centum of the estimated cost, appraised in like manner, of a new ship of the same size and like material: <i>Provided further</i>, That no part of this sum shall be applied to the repair of any other ship when the estimated cost of such repairs, to be appraised by a competent board of naval officers, shall exceed twenty per centum of the estimated cost, appraised in like manner, of a new ship of the same size and like material: <i>Provided further</i>, That nothing herein contained shall deprive the Secretary of the Navy of the authority to order repairs of ships damaged in foreign waters or on high seas, so far as may be necessary to bring them home: <i>Provided further</i>, That the sum to be paid out of this appropriation, under the direction of the Secretary of the Navy, for clerical, drafting, inspection, and messenger service in navy-yards, naval stations, and offices of superintending naval constructors, for the fiscal year ending June thirtieth, nineteen hundred and twelve, shall not exceed eight hundred and sixty-seven thousand and thirty-nine dollars; in all, construction and repair of vessels, 1912.....</p>	\$10,180,644	.....	\$10,180,644

Improvement of construction plants.

Detailed objects of expenditures and explanations.	Estimated amount required for each detailed object of expenditure.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for current fiscal year ending June 30, 1911.
For repairs and improvements of plant at:			
Navy-yard, Portsmouth, N. H.....	\$15,000.00	\$15,000.00	\$15,000.00
Navy-yard, Boston, Mass.....	20,000.00	20,000.00	20,000.00
Navy-yard, New York, N. Y.....	20,000.00	20,000.00	20,000.00
Navy-yard, Philadelphia, Pa.....	15,000.00	15,000.00	15,000.00
Navy-yard, Norfolk, Va.....	12,000.00	12,000.00	12,000.00
Navy-yard, Charleston, S. C.....	20,000.00	20,000.00	20,000.00
Navy-yard, Mare Island, Cal.....	15,000.00	15,000.00	15,000.00
Navy-yard, Puget Sound, Wash.....			15,000.00
Total.....	117,000.00	117,000.00	132,000.00

ESTIMATE D.—Increase of the navy: Construction and machinery; Increase of the navy: Torpedo boats; and Increase of the navy: Colliers.

Detailed objects of expenditures and explanations.	Estimated amount required for each detailed object of expenditure.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for current fiscal year ending June 30, 1911.
Increase of the navy:			
Construction and machinery (on account of hull and outfits of vessels, and steam machinery of vessels heretofore authorized).....	\$6,031,785.79	\$6,031,785.79	\$19,400,753
Torpedo boats (on account of submarine torpedo boats and subsurface destroyers heretofore authorized).....	890,833.88	890,833.88	2,104,971
Colliers (on account of two fleet colliers heretofore authorized).....	531,000.00	531,000.00	300,000
Total.....	7,453,619.67	7,453,619.67	21,805,724

NOTE.—The above does not include any money for new ships which may be authorized for 1912 at the next session of Congress.

The estimate of \$531,000 is submitted in accordance with the instructions contained in the department's letter of August 5, 1910, 26466-9, directing that the estimates for the next session of Congress include a sum sufficient to complete the collier as stipulated in the naval appropriation act of June 24, 1910.

In order to construct a "collier * * * on the Pacific coast in such government yard as the Secretary of the Navy shall direct," it will be necessary for Congress to increase the limit of cost on this collier from \$1,000,000, as provided in the act of June 24, 1910, to \$1,500,000, and to appropriate the sum of \$531,000, as estimated above.

WASHINGTON, D. C., August 12, 1910.

SIR: 1. Referring to the department's memorandum of the 11th instant, No. 27438, returning joint estimates of the bureaus of Construction and Repair and Steam Engineering for the fiscal year 1912, under the "Increase of the navy" appropriations for revision in view of the fact that the appropriation for "torpedo-boat destroyers," contained in the naval appropriation act of June 24, 1910, has been digested by the Treasury Department under the head of "Increase of the navy; construction and machinery," and the department, in its letter of August 5, 1910, No. 26466-9 having directed that the estimates for the next session of Congress include a sum sufficient to complete the collier, as stipulated in the above referred to naval act, the bureaus submit herewith revised joint estimates (see estimate sheet "D"—2 and comparative statement herewith "D"—3) under

appropriations "Increase of the navy; construction and machinery," "Increase of the navy; torpedo boats" and "Increase of the navy; colliers" for work on new vessels heretofore authorized by Congress:

"INCREASE OF THE NAVY; CONSTRUCTION AND MACHINERY."

Under Bureau of Construction and Repair:		
For fiscal year 1911.....	\$14,894,509.83	
For fiscal year 1912.....	8,875,715.00	
		\$23,770,224.83
Under Bureau of Steam Engineering:		
For fiscal year 1911.....	7,067,997.26	
For fiscal year 1912.....	4,681,250.00	
		11,749,247.26
Total estimate.....		35,519,472.09
Estimated balance available to pay on the above July 1, 1910.....		29,487,686.30
Appropriation required for fiscal year 1912.....		6,031,785.79

"INCREASE OF THE NAVY; TORPEDO BOATS."

Under Bureau of Construction and Repair:		
For fiscal year 1911.....	\$3,285,338.41	
For fiscal year 1912.....	1,596,185.95	
		4,881,524.36
Under Bureau of Steam Engineering:		
For fiscal year 1911.....	1,067,898.20	
For fiscal year 1912.....	502,000.00	
		1,569,898.20
Total estimate.....		6,451,422.56
Estimated balance available to pay on the above July 1, 1910.....		5,560,588.68
Appropriation required for fiscal year 1912.....		890,833.88

"INCREASE OF THE NAVY; COLLIERS" (FOR CONSTRUCTION OF THE CYCLOPS AND JUPITER).

Amount appropriated, act of May 13, 1908.....	\$1,500,000.00
Contract price, U. S. S. <i>Cyclops</i> , with authorized changes to date....	831,000.00
Balance.....	669,000.00

Act of June 24, 1910, making appropriation for the fiscal year 1911, reappropriates the above-mentioned balance, and also contains an appropriation of \$300,000 under "Increase of the navy; colliers," which makes a total amount available toward the construction of the U. S. S. *Jupiter* of \$969,000.

The total estimate for the construction of the <i>Jupiter</i> , based on estimates submitted by the navy-yard, Mare Island, Cal., is.....	\$1,500,000.00
Deduct the amount available per naval act of June 24, 1910.....	969,000.00
Appropriation required for fiscal year 1912.....	531,000.00

2. The above does not include any estimates for such new ships as may be recommended by the department for the next year's building programme. Attention is also invited to the fact that the limit of cost for the collier *Jupiter* imposed by Congress in the act of June 24, 1910, is \$1,000,000. The estimate submitted above for the *Jupiter* is based on estimates submitted by the navy-yard, Mare Island, Cal., in July, 1909, and the bureaus have requested that new estimates be submitted. In case the total of the revised estimates

when received from said navy-yard should be an amount other than \$1,500,000, the department will be advised accordingly.

3. The original estimates are returned herewith.

Very respectfully,

W. L. CAPPS,
Chief Constructor, U. S. Navy,
Chief of Bureau.

H. I. CONE,
Engineer in Chief, U. S. Navy,
Chief of Bureau.

The SECRETARY OF THE NAVY.

NEW SHIPBUILDING WORK AT NAVY-YARDS.

Congress, at its last session, provided for two battle ships, and directed that one of these should be built at a navy-yard, and the Navy Department has designated the navy-yard, New York, as the place of building the navy-yard-built ship. In order that a ship of the dimensions of this new battle ship might be laid down, certain extensions of the building slip were necessary, and steps to this end have already been taken.

The only vessel now actually under construction at a navy-yard is the U. S. S. *Florida*, now in course of completion at the navy-yard, New York. This vessel was launched on May 12, 1910, and, provided the work under cognizance of this bureau is not delayed by work under other bureaus, the vessel should be completed about August 1, 1911.

There is still another vessel whose construction has been directed by Congress to be undertaken in a navy-yard, namely, the collier provided for in the naval act of May 13, 1908. Congress specifically directed that this vessel be constructed "at such navy-yard on the Pacific coast as the Secretary of the Navy might designate." The navy-yard, Mare Island, Cal., was designated as the building yard. In view, however, of the limitations in cost subsequently imposed by Congress, it has been impossible to undertake the construction of this collier, since it was obvious that its cost in a navy-yard would greatly exceed the limit of cost imposed. The last naval appropriation bill, approved June 24, 1910, contained the following provision:

* * * *Provided*, That the unexpended balance of the sum of one million five hundred thousand dollars appropriated toward the construction of two fleet colliers authorized by the naval appropriation act approved May thirteenth, nineteen hundred and eight, is hereby reappropriated and made available for the construction of the collier therein designated to be built on the Pacific coast in such government yard as the Secretary of the Navy shall direct: *Provided further*, That the cost of said collier shall not exceed the sum of one million dollars.

The previous estimates of the cost of construction of this collier at the navy-yard, Mare Island, exceeded the above-noted limit of cost imposed by Congress in the last naval appropriation bill; but, in order that the estimates should be brought up to date, additional estimates were requested from that navy-yard under the conditions now prevailing at navy-yards. The estimate of cost of construction of this collier, recently received from the navy-yard, Mare Island, is slightly in excess of that previously submitted, and indicates clearly that this collier can not be built at a navy-yard within the limit of cost imposed by Congress, namely, \$1,000,000.

A complete statement of the circumstances relating to the construction of this fleet collier at the navy-yard, Mare Island, up to October 1, 1909, is contained in the last annual report of the Chief of the Bureau of Construction and Repair, pages 13 and 14, to which the department's attention is respectfully invited.

VESSELS BUILDING UNDER CONTRACT IN PRIVATE SHIPYARDS.

In a tabular statement on page 24 of this report is given a list of vessels now in course of construction under contract with private shipbuilding firms. These vessels comprise 3 battle ships, 15 destroyers, 10 submarine torpedo boats, and 2 colliers. The degree of completion, the probable date of completion, and the contract time of construction are given in detail in the tabular statement just referred to. In this connection the department's attention is invited to the increased rapidity of construction of naval vessels in the United States during the past few years. This increase in rapidity is due in part to greater familiarity with government work on the part of contractors and in part to a more complete preparation of plans than was hitherto practicable; also to the efforts made to restrict changes in contract plans to the lowest number compatible with the interests of the Government.

As a matter of fact the rapidity of war-ship construction in the United States compares most favorably at the present time with the rate of such construction in those foreign countries which have established a reputation for rapidity in such work. Much of the confusion and misunderstanding which have frequently arisen in connection with statements as to the time required to build a battle ship are believed to be directly attributable to a careless method of comparison, the conditions under which the comparisons were made being, in many cases, quite dissimilar for the vessels whose rate of construction was being compared. In making such comparisons it is obvious that care should be taken to have the basis of the comparison the same in each case. It is the failure to observe this precaution which has so often placed the reported rate of construction of vessels in this country at a disadvantage with the reported rate of construction of vessels in other countries.

The nominal time of construction of a battle ship varies directly with the dates chosen for comparison. Thus for the date of the beginning of construction of a vessel there may be taken any one of the following three dates, namely:

- (1) The date of authorization by the legislative authority.
- (2) The date of signing the contract for such vessels as are built by contract.
- (3) The date of laying the keel.

Similarly for the date of completion of the ship the following choice of dates is available, namely:

- (1) The date of holding the contract trial for speed and other contract requirements.
- (2) The date of actual delivery of the vessel to the Government in the case of contract-built vessels.
- (3) The date when the vessel is actually placed in commission for service.

Moreover, in fixing the dates of the above-noted events, wide variations may exist, since the actual date of laying the keel, for instance, may be deferred, while all the other work may be progressing at a normal rate. In a similar manner the date of holding the contract trial, the date of delivery of the vessel, and the date of commissioning may all be varied within considerable limits, depending upon the particular conditions existing in the case of each vessel. It is therefore obvious that the time elapsing between certain arbitrary dates in the course of construction and completion of a vessel may vary considerably for two vessels built in different places, under different conditions, even though the actual total time employed in construction on the two vessels may vary very slightly. It is largely on account of the above-noted possible variations in dates that currency has sometimes been given to the allegation that United States battle ships were built more slowly than those of many foreign countries. Such an allegation is, however, at the present time without foundation in fact.

The date of signing the contract for the construction of United States battle ships has usually been taken as the date of the beginning of the construction of the vessel, although this date is naturally many months prior to the date of laying the keel. The date of completion of the same vessel has usually been taken as the date when the vessel was commissioned for active service, although in many instances the vessel was practically ready for service and could have been commissioned, in an emergency, several months before the date of the actual commissioning.

There is given below a tabular statement of the date of authorization, date of signing contract, date of laying keel, and date of delivery of recent United States battle ships, and similar data, so far as available, for typical foreign battle ships of the same period. It will be seen from this statement that, in recent years, the United States has been among the leaders in rapidity of battle-ship construction. Certain recently constructed foreign vessels apparently had an abnormally high rate of construction, but a careful analysis of the conditions existing on the vessels at the time of laying the keel and the time of delivery of the vessels, leaves no doubt that the reported period of construction for these vessels does not represent the actual total time required in building the vessels and placing them in complete readiness for officers and crew and the efficient performance of the duty for which designed.

The last two battle ships completed for the United States Navy, namely, the *Delaware* and *North Dakota*, were both delivered well within the contract time for completion, and this contract time for completion, it may be well to note, is considerably less than that for preceding United States battle ships of considerably less displacement. These vessels were, at the time of their design, the largest battle ships actually authorized for construction, and each of them was given its trial trip within less than two years from the date of laying the keel, the condition of the vessel at that time being such that it could have been put in active service very soon after the trial. That there was a subsequent delay of several months in fitting out at navy-yards was due entirely to the fact that certain extensive changes in the original designs were authorized by the department

at such a time in the construction of these vessels that it was deemed advisable not to undertake them until after the vessels had been delivered to the Government. Had the original designs been adhered to, these vessels could have been in all respects made ready for service at the time of their delivery by the contractors. In the case of the *Delaware* and *North Dakota*, and previous and subsequent battle ships, no attempt was made to shorten the normal time of construction by unduly deferring the laying of the keel, and the construction of guns, machinery, and armor was not begun until the contracts for the vessels had been signed.

The results so far at hand in relation to rapidity of construction of the *Utah* are even more favorable than those obtaining in the cases of the *Delaware* and *North Dakota*; and the *Florida*, now building at the navy-yard, New York, is only slightly behind her sister ship, the *Utah*. The date of completion of both these vessels will, however, be delayed by reason of changes which were approved subsequent to the laying of the keel. While, as previously stated, every effort is made to eliminate such changes, the improvements in naval matériel makes it almost impossible to entirely eliminate changes in plans during the period of construction of the vessel.

With the system and methods of war-ship construction now in vogue in the United States, it is believed to be feasible for the United States to build first-class battle ships in as short a period of time as any other shipbuilding country, and actual experience seems to demonstrate that the rapidity of construction in the United States is greater than the average rate of construction in the principal foreign shipbuilding countries. It is also worthy of note that this decreased time of construction has been obtained concurrently with a decrease in the unit cost of construction. In fact, the total cost, per ton of displacement, of battle ships built by contract for the United States Navy within the past few years has been less than the total cost, per ton of displacement, of similar vessels built in foreign countries, and this in spite of the higher rates of wages paid to workmen in United States shipyards. The following table gives particulars of the time necessary to construct recent typical battle ships in the United States, British, German, Japanese, French, and Italian navies:

Time required for building battle ships in different countries.

UNITED STATES.

Name.	Displacement.	Authorized.	Date of order or contract.	Keel laid.	Date of delivery to Government.	Date of first commission.	Time from order or contract to delivery to Government.		Time from order or contract to first commission.		Time from laying of keel to first commission.	
							Years.	Months.	Years.	Months.	Years.	Months.
New Hampshire.....	16,000	Apr. 27, 1904	Dec. 27, 1904	May 1, 1905	Mar. 14, 1908	Mar. 19, 1908	3	3	3	3	2	10
South Carolina.....	16,000	Mar. 3, 1905	July 21, 1906	Dec. 18, 1906	Nov. 5, 1909	Nov. 1, 1910	3	3	3	7	3	2
Michigan.....	16,000	.....do	July 20, 1906	Dec. 17, 1906	Aug. 31, 1909	Jan. 4, 1910	3	3	3	6	3	1
Delaware.....	20,000	June 29, 1906	Aug. 6, 1907	Nov. 11, 1907	Feb. 15, 1910	Apr. 4, 1910	2	2	2	8	2	5
North Dakota.....	20,000	Mar. 2, 1907	.....do	Dec. 16, 1907	Apr. 11, 1910	Apr. 11, 1910	2	2	2	8	2	4

GREAT BRITAIN.

Lord Nelson.....	16,500	1904	Jan., 1905 ^a	May, 1905	.....	Dec. 1, 1908	.....	.....	.....	.....	.....	.....
Dreadnaught.....	17,900	1905	Sept. 2, 1906	Oct., 1905	.....	Dec. 11, 1906	.....	.....	.....	.....	.....	.....
Thunderbolt.....	18,000	1906	Sept. 27, 1906	Dec., 1906	.....	Feb. 20, 1909	.....	.....	.....	.....	.....	.....
Generaux.....	18,000	1906	Dec. 26, 1906	Jan., 1907	.....	May 13, 1909	.....	.....	.....	.....	.....	.....
Superb.....	18,000	1906	.....	Feb., 1907	.....	May 29, 1909	.....	.....	.....	.....	.....	.....

GERMANY.

Pommern.....	13,200	1904	.....	Apr., 1904	.....	July, 1907	.....	.....	.....	.....	.....	.....
Hannover.....	13,200	1904	.....	.....do	.....	Oct., 1907	.....	.....	.....	.....	.....	.....
Schleswig-Holstein.....	13,200	1905	.....	May, 1905	.....	July, 1908	.....	.....	.....	.....	.....	.....
Schlesien.....	13,200	1905	.....	.....do	.....	Sept., 1908	.....	.....	.....	.....	.....	.....
Nassau.....	18,500	1906	.....	July, 1907	.....	Oct., 1909	.....	.....	.....	.....	.....	.....
Westfalen.....	18,500	1906	.....	Aug., 1907	.....	.....do	.....	.....	.....	.....	.....	.....
Rheinland.....	18,500	1907	.....	Nov., 1907	.....	Mar., 1910 ^c	.....	.....	.....	.....	.....	.....

^a Preparation of preliminary plans authorized, construction not authorized until March 2, 1907.

^b Contracts ordered about January, 1906. First order for other masts July 11, 1906. The ship was not completed when commissioned as there was expended after that date about \$1,200,000 for new construction, changes and fittings, which masts cost \$200,000 was spent during the year from March 31, 1907, to April 1, 1908. Information obtained from official British naval estimates and statements of first lord of the admiralty.

^c Reported completed.

Time required for building battle ships in different countries—Continued.

JAPAN.

Name.	Displacement.	Authorized.	Date of order or contract.	Keel laid.	Date of delivery to Government.	Time from order or contract to delivery to Government.		Time from order or contract to first commission.		Time from laying of keel to first commission.	
						Years.	Months.	Years.	Months.	Years.	Months.
Satsuma.....	19,200	1904.....	.....	May, 1905.....	.....	.....	.....	.....	.....	.....	.....
Aki.....	19,800	1905.....	.....	Mar., 1906.....	.....	.....	.....	.....	.....	.....	.....

FRANCE.

Liberte.....	14,865	1902.....	May 21, 1902	1903.....	.....	.....	.....	.....	.....	.....	.....
Democratie.....	14,865	1902.....	Apr. 5, 1902	May 1, 1903	.....	.....	.....	.....	.....	.....	.....
Justice.....	14,865	1902.....	May 21, 1902	1903.....	.....	.....	.....	.....	.....	.....	.....
Verite.....	14,865	1902.....	.....do	1903.....	.....	.....	.....	.....	.....	.....	.....

ITALY.

Regina Elena.....	12,625	Nov. 3, 1900	.....	Mar. 27, 1901	.....	.....	.....	.....	.....	.....	.....
Napoli.....	12,625	Aug. 21, 1902	.....	Oct. 21, 1903	.....	.....	.....	.....	.....	.....	.....
Roma.....	12,625	.....do	.....	Sept. 20, 1903	.....	.....	.....	.....	.....	.....	.....

• Reported ready.

• Will not be tried until fall of 1910.

IMPROVEMENT OF NAVY-YARD PLANTS.

In a subsequent portion of this report will be found extracts from reports of officers in charge of hull divisions at navy-yards, relating to improvement of machinery plant and repair facilities in their respective departments. While the majority of the recommendations contained in the above-noted extracts do not involve changes of a serious character, there are many which should be undertaken as soon as practicable in order that the plant may be maintained in a high state of efficiency. It may also be noted that all necessary replacements of worn-out machinery and the maintenance of existing machinery plants are allowed for in the current Construction and Repair estimates and do not involve special additional appropriations.

At nearly all navy-yards there is a deficiency in berthing space for ships. This deficiency is described more fully in a subsequent portion of this report under each navy-yard heading.

There is also need for additional dry-dock facilities—a need which is becoming increasingly urgent with the increase in size of battle ships constructed. Attention is invited to the more detailed comments on this subject which appear later on in this report under the heading "Reports as to navy-yards and naval stations."

In order to maintain the efficiency of the personnel at navy-yards, it is also desirable that repair work be distributed as much as possible throughout the year and not allowed to accumulate in certain periods of the year, with corresponding scarcity of work at other periods. An even distribution of work will permit a highly trained force of approximately uniform strength to be maintained at the principal navy-yards. This force would not only be the nucleus for a larger force to meet any unusual emergency, but could, under normal conditions, take care of the current work of maintenance of the fleet. An approximately uniform distribution of work throughout the year is especially desirable at such navy-yards as those at Mare Island and Puget Sound, on the Pacific coast, and those navy-yards on the Atlantic coast whose situation is somewhat remote from large ship-building centers.

In connection with the general subjects of "Improvement of navy-yard plants," "Distribution and cost of repair work at navy-yards," and "Maintenance and repair of the fleet," attention is invited to the last annual report of the Chief of the Bureau of Construction and Repair, pages 7 to 12, inclusive, in which these subjects are treated more fully. The recommendations therein contained are renewed.

PAY OF CLERICAL AND TECHNICAL EMPLOYEES.

Efficient work in any department is largely dependent upon an adequate and efficient technical and clerical force. The greater cost of living has made it increasingly difficult for the bureau, under its present schedule of pay, to retain employees entirely suited to its requirements. The present technical and clerical force is, in the opinion of the Chief Constructor, unusually efficient, and it is believed that true economy will result if the most efficient of its employees can look forward to reasonable increase in remuneration in the near

future. The bureau therefore invites special attention to the subject, and hopes that it will be practicable for the department to provide a reasonable increase in compensation for the civil employees at the bureau and at offices of superintending naval constructors and inspectors. In this connection, attention is invited to the comments contained in the bureau's annual reports for the fiscal years 1907 and 1909 with respect to the pay of technical and clerical employees.

INCREASE IN NAVY DURING THE PAST SEVEN YEARS.

There are given below tables showing the number and displacement of various classes of vessels on January 1, 1904, and September 30, 1910. From these tables it appears that the total battle-ship displacement available for service has increased, in a little less than seven years, from 118,721 tons on January 1, 1904, to 412,461 tons on September 30, 1910; and that the total battle-ship displacement available for service, under construction and authorized, has increased from 324,461 tons on January 1, 1904, to 562,111 tons on September 30, 1910; and the total displacement of what may be termed "military vessels," including those under construction and authorized, has increased from 651,266 tons on January 1, 1904, to 940,112 tons on September 30, 1910.

The foregoing figures, and an inspection of the tables given below, indicate clearly the volume and character of the work undertaken by the bureau during the period covered by the tabular statements.

Summary of vessels in the United States Navy.

JANUARY 1, 1904.

Type.	Available for service, including those under repair.		Under construction.		Authorized.		Total.	
	Number.	Displacement.	Number.	Displacement.	Number.	Displacement.	Number.	Displacement.
Battle ships.....	11	Tons. 118,721	12	Tons. 179,740	2	Tons. 26,000	25	Tons. 324,461
Armored cruisers.....	2	17,365	8	111,080			10	128,445
Armored ram.....	1	2,183					1	2,183
Monitors.....	10	39,004					10	39,004
Protected cruisers.....	14	60,070	8	41,100			22	105,170
Unprotected cruisers and gunboats.....	24	32,164	2	2,170	1	(*)	27	34,334
Gunboats under 500 tons.....	21	4,300					21	4,300
Torpedo-boat destroyers.....	16	6,695					16	6,695
Steel torpedo boats.....	30	4,508	5	1,231			35	5,739
Submarine torpedo boats.....	8	935					8	935
Total.....	137	285,945	35	339,321	3	26,000	175	651,266
Colliders.....	15	81,057					15	81,057
Miscellaneous ^b	128	207,306	4	4,176			132	211,482
Grand total.....	280	574,308	39	343,479	3	26,000	322	943,805

* Gunboat for Great Lakes; construction not yet authorized by department.

^b Includes all types in the navy not enumerated above, fit and unfit for sea service; also five obsolete monitors, and wooden torpedo boat.

Summary of vessels in the United States Navy—Continued.

SEPTEMBER 30, 1910.

Type.	Available for service, including those under repair.		Under construction.		Authorized.		Total.	
	Number.	Displacement.	Number.	Displacement.	Number.	Displacement.	Number.	Displacement.
Battle ships.....	30	<i>Tons.</i> 412,461	4	<i>Tons.</i> 95,650	2	<i>Tons.</i> 54,000	36	562,111
Armored cruisers.....	12	157,445					12	157,445
Monitors.....	10	39,004					10	39,004
Protected cruisers.....	21	102,170					21	102,170
Unprotected cruisers and gunboats.....	23	35,883			1	(e)	24	35,883
Gunboats under 500 tons.....	12	3,095					12	3,095
Torpedo-boat destroyers.....	22	10,937	14	10,388	6	4,452	42	25,777
Steel torpedo boats.....	32	5,157					32	5,157
Submarine torpedo boats.....	19	3,822	9	3,787	8	3,861	36	11,470
Total.....	181	769,974	27	109,825	17	62,313	225	942,112
Coilers.....	19	135,602	2	38,735	3	58,110	24	232,447
Miscellaneous c.....	115	191,806					115	191,806
Grand total.....	315	1,097,382	29	148,560	20	120,423	364	1,366,365

a Gunboat for Great Lakes; construction not yet authorized by department.

b Displacement of the four authorized by the last Congress estimated.

c Includes training ships, special class, auxiliary cruisers, converted yachts, transports and supply ships, hospital ships, and tugs (83), 112,379 tons; includes also vessels available for special service, viz, floating hospital, wooden torpedo boat, iron and wooden steam vessels, wooden sailing vessels, and receiving and prison ships (32), 79,427 tons; total (115), 191,806 tons.

EFFICIENCY OF BUREAU PERSONNEL.

As the present chief of the Bureau of Construction and Repair is about to relinquish the office which he has had the honor to administer for nearly seven years past, he feels it an imperative but especially agreeable duty to place on record his appreciation of the loyal, intelligent, and efficient assistance rendered by all officers and civil employees attached to the bureau and the various outside inspections and navy-yard departments doing bureau work. As in every walk of life, there have been those whose work has been conspicuously efficient and whose abilities and attention to duty have been of an exceptionally high order of merit. Where the general efficiency has been so very high, however, and where the results attained reflect credit upon the whole personnel of the corps of naval constructors and their technical and clerical associates in the civil branches of the offices concerned in the bureau's work, it seems fitting that this final tribute to the efficiency of the personnel should be general rather than individual. The chief constructor will content himself, therefore, with the simple though most comprehensive statement that he believes that no public official could possibly have had more devoted, intelligent, and efficient assistants; and such success as has been achieved in the highly technical and difficult work of the Bureau of Construction and Repair during the period of office of the present incumbent has been in the highest degree the result of the earnest and effective cooperation of the officers and civil employees associated with him in the work of the bureau. The chief constructor, therefore, deems it a great privilege to have served so long and so happily with such an efficient corps of assistants. Their work necessarily

speaks for itself, but it seems due to them to give formal expression to the appreciation in which their unusually efficient work is held by the retiring chief constructor, who hereby extends to them, through the Secretary of the Navy, his most earnest and heartfelt thanks.

VESSELS SURVEYED.

The vessels named in the following table have been surveyed and repairs authorized during the past fiscal year:

Surveys on vessels.

Name.	Where surveyed.	Date of survey.	Estimated cost of repairs.
Abarenba.....	Norfolk.....	Oct. 10, 1909	\$7,386.71
Do.....	do.....	Nov. 30, 1909	26,140.00
Alleen.....	New York.....	Apr. 12, 1910	3,527.00
Ajax.....	Portsmouth, N. H.....	July 9, 1909	12,532.00
Do.....	do.....	Jan. 15, 1910	39,386.00
Alabama.....	New York.....	Jan. 11, 1910	203,512.00
Albany.....	Mare Island.....	Dec. 17, 1909	13,004.45
Atlanta.....	Charleston.....	Mar. 17, 1910	4,590.00
Birmingham.....	Boston.....	Aug. —, 1909	10,398.67
Brutus.....	do.....	Mar. 10, 1910	12,058.69
Buffalo.....	Mare Island.....	Dec. 10, 1909	15,223.79
Cæsar.....	Boston.....	Mar. —, 1910	3,254.80
California.....	Mare Island.....	Nov. 20, 1909	33,083.70
Celtic.....	New York.....	Mar. 5, 1910	18,817.66
Chester.....	do.....	Aug. 12, 1909	17,703.79
Cheyenne.....	Mare Island.....	Oct. 20, 1909	11,641.64
Chicago.....	Boston.....	Feb. 19, 1910	20,266.00
Colorado.....	Puget Sound.....	Aug. 13, 1909	27,862.00
Connecticut.....	New York.....	Dec. 11, 1909	55,218.73
Culgoa.....	do.....	Jan. 5, 1910	10,861.91
Do.....	do.....	Feb. 15, 1910	4,269.96
Cumberland.....	do.....	Aug. 24, 1909	6,529.27
De Long.....	Boston.....	Nov. —, 1909	7,528.00
Des Moines.....	do.....	July 31, 1909	25,987.58
Dixie.....	Charleston.....	May 24, 1910	17,326.00
Dolphin.....	New York.....	Nov. 30, 1909	14,336.07
Dubuque.....	Portsmouth, N. H.....	Mar. 26, 1910	10,146.00
Eagle.....	do.....	Sept. 24, 1909	9,958.60
Georgia.....	Philadelphia.....	Sept. 7, 1909	86,094.53
Do.....	do.....	Mar. 14, 1910	19,855.63
Glacier.....	Mare Island.....	Nov. 3, 1909	14,394.34
Hartford.....	Norfolk.....	Feb. 7, 1910	3,270.50
Hist.....	Portsmouth, N. H.....	Nov. 1, 1909	9,850.00
Idaho.....	Philadelphia.....	Oct. 6, 1909	24,122.48
Do.....	do.....	Mar. 8, 1910	12,352.97
Do.....	do.....	Apr. 12, 1910	3,917.23
Illinois.....	Boston.....	July 15, 1909	290,495.00
Intrepid.....	Mare Island.....	Dec. 10, 1909	2,854.45
Iowa.....	Norfolk.....	Apr. 12, 1910	36,673.81
Justin.....	Mare Island.....	Nov. 11, 1909	4,975.89
Do.....	do.....	Mar. 26, 1910	5,924.34
Kansas.....	Philadelphia.....	Mar. 11, 1910	14,100.38
Kearsarge.....	do.....	Aug. 2, 1909	278,666.00
Lebanon.....	Norfolk.....	Nov. 30, 1909	3,371.50
Louisiana.....	do.....	Mar. 18, 1910	64,617.13
Machias.....	New York.....	Aug. 30, 1909	3,334.19
Marcellus.....	Portsmouth, N. H.....	Nov. 20, 1909	7,029.00
Marietta.....	do.....	Sept. 30, 1909	8,314.00
Maryland.....	Mare Island.....	Dec. 15, 1909	33,703.34
Mayflower.....	New York.....	Dec. 7, 1909	15,716.19
Minnesota.....	Norfolk.....	July 1, 1909	141,673.86
Mississippi.....	Philadelphia.....	Mar. 9, 1910	14,772.50
Missouri.....	Boston.....	Aug. 6, 1909	66,866.47
Do.....	do.....	Nov. —, 1909	4,292.50
Nebraska.....	New York.....	Dec. 10, 1909	29,448.66
New Hampshire.....	Portsmouth, N. H.....	Mar. 7, 1910	67,793.00
New Jersey.....	Boston.....	July —, 1909	92,690.59
Do.....	do.....	Jan. —, 1910	15,575.28
North Carolina.....	Norfolk.....	Mar. 8, 1910	24,157.85
Ohio.....	New York.....	Dec. 11, 1909	5,412.43
Oseola.....	Key West.....	June 6, 1910	3,967.70
Paducah.....	Portsmouth, N. H.....	Mar. 7, 1910	4,881.00
Pennsylvania.....	Puget Sound.....	May 12, 1910	31,137.15
Potomac.....	Charleston.....	July 3, 1909	16,500.00
Prairie.....	Philadelphia.....	Mar. 19, 1910	16,551.70
Preble.....	Mare Island.....	Nov. 27, 1909	9,564.31
Rhode Island.....	New York.....	Dec. 11, 1909	31,981.30

Surveys on vessels—Continued.

Name.	Where surveyed.	Date of survey.	Estimated cost of repairs.
St. Louis.....	Puget Sound.....	Dec. 20, 1909	\$15,286.14
Salem.....	Boston.....	Aug. 4, 1909	6,428.68
Soisce.....	Charleston.....	Dec. 13, 1909	55,722.00
South Dakota.....	Mare Island.....	Dec. 14, 1909	35,334.34
Do.....	do.....	June 25, 1910	18,166.16
Tacoma.....	New York.....	July 16, 1909	8,829.44
Tennessee.....	Puget Sound.....	Aug. 26, 1909	38,641.00
Do.....	do.....	Feb. 28, 1910	25,338.00
Do.....	do.....	Apr. 16, 1910	7,179.38
Vermont.....	Boston.....	Jan. —, 1910	42,193.68
Virginia.....	Norfolk.....	July 20, 1909	131,484.52
Washington.....	Puget Sound.....	Aug. 26, 1909	34,568.50
Wasp.....	New York.....	Mar. 23, 1910	4,127.79
West Virginia.....	Mare Island.....	Dec. 16, 1909	26,674.45
Whipple.....	do.....	Jan. 29, 1910	7,684.00
Wisconsin.....	Portsmouth, N. H.....	July 29, 1909	85,793.00
Do.....	do.....	Dec. 23, 1909	6,586.00
Wompatuck.....	Cavite.....	July 9, 1909	6,352.30
Yankton.....	New York.....	Nov. 27, 1909	5,998.61

STEEL INSPECTION.

The total quantity of steel material inspected by the bureau during the fiscal year ending June 30, 1910, was 124,745,596 pounds, of which 64,264,437 pounds were passed and shipped for incorporation into naval vessels under construction or repair. The distribution of this material among the several districts into which the inspection work is divided as well as the quantities rejected for various causes, percentage of rejection, etc., are given in the tables below:

Summary of work performed by steel inspectors under the Bureau of Construction and Repair for the eastern and western districts during the fiscal year ending June 30, 1910.

	Eastern district.	Western district.	Total.
Total amount of material rolled and inspected..... pounds..	34,589,679	90,155,917	124,745,596
Amount rejected for physical tests..... do.....	1,729,053	4,729,060	6,458,113
Percentage rejected for physical tests.....	5.00	5.24	5.18
Amount rejected for chemical tests..... pounds..	1,914,397	89,045	2,003,442
Percentage rejected for chemical tests.....	5.53	0.10	1.61
Amount rejected for surface defects..... pounds..	1,606,225	18,120,356	19,726,581
Percentage rejected for surface defects.....	4.64	20.10	15.81
Amount rejected for all causes..... pounds..	5,249,675	22,938,461	28,188,136
Percentage rejected for all causes.....	15.17	25.44	22.60
Scrap..... pounds..	8,596,994	23,696,029	32,293,023
Total amount of material accepted and shipped.....	20,743,010	43,521,427	64,264,437

The following table shows the distribution of the material among the vessels building:

Detail statement of shipments for each vessel from the eastern and western districts for the fiscal year ending June 30, 1910.

Name of vessel, etc.	Eastern district.	Western district.	Total.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Arkansas.....	2,878,579	17,934,782	20,813,361
Delaware.....	9,895	.....	9,895
Florida.....	3,189,882	1,338,840	4,528,722
North Dakota.....	55,031	400	55,431
South Carolina.....	629	.....	629
South Dakota.....	740	.....	740

Detail statement of shipments for each vessel from the eastern and western districts for the fiscal year ending June 30, 1910—Continued.

Name of vessel, etc.	Eastern district.	Western district.	Total.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Submarine torpedo boats:			
Carp and Barracuda.....	21,359	145,093	166,452
Pickrel and Skate.....	9,160	141,456	150,616
Skipjack and Sturgeon.....	10,861	527,695	538,556
Thrasher.....	16,474	532,531	549,005
Tuna.....	3,468	22,609	26,077
Seal.....	23,466	21,664	45,129
Torpedo-boat destroyers:			
Ammen.....	1,527,077	31,237	1,558,314
Phusser.....	80		80
McCall and Burrows.....	124,765		127,524
McGahan.....	992,489	19,249	1,011,738
Fatterson.....	957,969	54,463	1,012,432
Perkins and Sterett.....	161,737	2,253	163,990
Paulding and Drayton.....	529,299	50,912	580,211
Roe and Terry.....	5,443	3,757	9,200
Smith and Lamson.....	1,754		1,754
Tripp.....	1,170,438	129,368	1,299,806
Walke.....	1,608,971	37,120	1,646,091
Warrington and Mayrant.....	251,700	4,820	256,520
Utah.....	789,700	1,903,802	2,693,502
Wyoming.....	2,626,942	17,343,397	19,970,339
Ammunition lighter No. 13.....	10,268	340,779	351,047
Contracts and requisitions.....	3,764,835	2,932,441	6,697,276
Total.....	20,743,010	43,521,427	64,264,437

Orders for material requiring inspection were distributed among the following manufacturers:

EASTERN DISTRICT.

American Iron and Steel Manufacturing Company.....	Reading, Pa.
American Iron and Steel Manufacturing Company.....	Lebanon, Pa.
American Manganese Bronze Company.....	Holmesburg, Pa.
American Steel Foundries.....	Thurlow, Pa.
Baldt Steel Company.....	New Castle, Del.
Baltimore Copper Smelting and Rolling Company.....	Baltimore, Md.
Bethlehem Steel Company.....	South Bethlehem, Pa.
Caskey, Wm., & Son.....	Philadelphia, Pa.
Central Iron and Steel Company.....	Harrisburg, Pa.
Chester Steel Casting Company.....	Chester, Pa.
Cramp, Wm., & Sons Ship and Engine Building Company.....	Philadelphia, Pa.
Crown Smelting Company.....	Chester, Pa.
Crucible Steel Company of America.....	Harrison, N. J.
Delaware Seamless Tube Company.....	Auburn, Pa.
Federal Steel Foundry Company.....	Chester, Pa.
Graphite Lubricating Company.....	Bound Brook, N. J.
Harrisburg Pipe and Pipe Bending Company.....	Harrisburg, Pa.
Hendricks Brothers.....	Soho, N. J.
Hoopes & Townsend Company.....	Philadelphia, Pa.
J. C. H. Galvanizing Company.....	Philadelphia, Pa.
Lebanon Chain Works.....	Lebanon, Pa.
Lonergan, J. E., Company.....	Philadelphia, Pa.
Longmead Iron Company.....	Conschocken, Pa.
Lukens Iron and Steel Company.....	Coatesville, Pa.
Midvale Steel Company.....	Nicetown, Pa.
McCullough Iron Company.....	Wilmington, Del.
Morse-Williams Company.....	Philadelphia, Pa.
New Jersey Wire Cloth Company.....	Trenton, N. J.
Paxson, J. W., and Company.....	Philadelphia, Pa.
Pennsylvania Forge Company.....	Bridesburg, Pa.
Pennsylvania Steel Company.....	Steelton, Pa.
Pennsylvania Steel Company.....	Lebanon, Pa.

Pennsylvania Shafting Company.....	Spring City, Pa.
Penn Steel Casting and Machine Company.....	Chester, Pa.
Philadelphia Steel and Forge Company.....	Tacony, Pa.
Phoenix Iron Company.....	Phoenixville, Pa.
Reading Steel Casting Company.....	Reading, Pa.
Riverside Metal Company.....	Riverside, N. J.
Rossmasser-Bonine Electric Company.....	Philadelphia, Pa.
Standard Roller Bearing Company.....	Philadelphia, Pa.
Schoen, Jackson Company.....	Media, Pa.
The Continental Iron Works.....	Brooklyn, N. Y.
Wood, Alan, Iron and Steel Company.....	Conshohocken, Pa.
Wood, Alan, Iron and Steel Company.....	Ivy Rock, Pa.
Wood, J., Brothers Company.....	Conshohocken, Pa.
Worth Brothers Company.....	Coatesville, Pa.

WESTERN DISTRICT.

American Sheet and Tin Plate Company.....	New Philadelphia, Ohio.
American Sheet and Tin Plate Company.....	Vandergrift, Pa.
Cambria Steel Company.....	Johnstown, Pa.
Carnegie Steel Company (Clairton Works).....	Clairton, Pa.
Carnegie Steel Company (Clark Mills).....	Pittsburg, Pa.
Carnegie Steel Company (Duquesne Works).....	Duquesne, Pa.
Carnegie Steel Company (Edgar Thomson Works).....	Braddock, Pa.
Carnegie Steel Company (Homestead Works).....	Munhall, Pa.
Carnegie Steel Company (Lower Union Mills).....	Pittsburg, Pa.
Carnegie Steel Company (Upper Union Mills).....	Pittsburg, Pa.
Carnegie Steel Company (Valley Mills).....	Youngstown, Ohio.
Carter Iron Company.....	Hays, Pa.
Carbon Steel Company.....	Pittsburg, Pa.
Colonial Steel Company.....	Colona, Pa.
Crucible Steel Company of America (Crescent Works) ...	Pittsburg, Pa.
Crucible Steel Company of America (Park Works).....	Pittsburg, Pa.
Crucible Steel Company of America (Singer-Nimick Works).....	Pittsburg, Pa.
Deforest Sheet and Tinplate Company.....	Niles, Ohio.
Jones & Laughlin-Steel Company.....	Pittsburg, Pa.
Kelly & Jones Company.....	Greensburg, Pa.
Lappan, Jas., Manufacturing Company.....	Pittsburg, Pa.
Lockhart Iron and Steel Company.....	McKees Rocks, Pa.
Mark Manufacturing Company.....	Zanesville, Ohio.
McCance Brothers.....	Pittsburg, Pa.
National Tube Company.....	Christy Park, Pa.
National Tube Company.....	Ellwood City, Pa.
National Tube Company.....	McKeesport, Pa.
New Castle Forge Company.....	New Castle, Pa.
Pittsburg Forge and Iron Company.....	Woods Run, Pa.
Pittsburg Steel Products Export Company.....	Monessen, Pa.
Tyler Tube and Pipe Company.....	Washington, Pa.
Union Steel Casting Company.....	Pittsburg, Pa.
Wheeling Steel and Iron Company.....	Wheeling, W. Va.
Youngstown Sheet and Tube Company.....	Youngstown, Ohio.

The following is a list of the officers and inspectors engaged upon the inspection of steel under this bureau:

EASTERN DISTRICT.

Assistant Naval Constructor James Reed, jr., U. S. Navy, inspector in charge; headquarters, post-office building, Philadelphia, Pa., relieving Chief Carpenter L. L. Martin, U. S. Navy.

Chief Carpenter L. L. Martin, U. S. Navy, inspector in charge, detached January 13, 1910.

Assistant inspectors: J. E. Rettig, John T. Callaghan, jr., R. P. Hodgson, J. B. Fry, I. F. De Lany, E. A. Gage (resigned Apr. 15, 1910).

Copyist (clerk), Thos. F. Maccabe.

WESTERN DISTRICT.

Naval Constructor G. A. Bisset, U. S. Navy, inspector in charge; headquarters, Homestead Steel Works, Munhall, Pa., relieving Chief Carpenter E. W. Craig, U. S. Navy.

Chief Carpenter E. W. Craig, U. S. Navy, inspector in charge, detached April 6, 1910.

Assistant inspectors: W. B. Canfield, L. C. Martin, W. S. Davis, J. C. Wickersham, W. B. Petch, A. P. Harclerode, J. A. O'Brien, W. H. Wills, W. H. Caldwell, C. L. Brinton (furloughed June 23, 1910), W. W. Williams (resigned Apr. 14, 1910).

Stenographer and typewriter (clerk), H. E. Hahn.

Special laborer (clerk), W. N. Robson.

INSPECTION OF ELECTRICAL MATERIAL.

The inspection of electrical material under the bureau at the works of the General Electrical Company at Schenectady, N. Y., and Lynn, Mass., was in charge of Naval Constructor F. B. Zahm, U. S. Navy, retired.

The number of motors inspected during the year were as follows: Shipboard, 158; navy-yard, 25; total, 183.

In addition there were inspected a number of spare parts, etc., required to replace broken or worn parts on motors and controlling appliances already in service.

ADDITIONS TO THE NAVY SINCE JUNE 30, 1909.

The additions to the effective force of the navy by the completion of vessels building under contract and at navy-yards are as follows: Battle ships *Michigan*, *South Carolina*, *Delaware*, and *North Dakota*; torpedo-boat destroyers *Flusser*, *Reid*, *Smith*, *Lamson*, and *Preston*; submarine torpedo boats *Narwhal*, *Grayling*, *Tarpon*, *Bonita*, *Stingray*, and *Snapper*; tug *Patapsco*; and colliers *Mars*, *Vulcan*, *Hector*, *Vestal*, and *Prometheus*.

Statement of data relative to trials and acceptances of vessels added to the navy since June 30, 1909.

Name.	Type.	Date of trial.	Speed required by contract.	Speed obtained on trial.	Date of preliminary acceptance.	Date of final acceptance.	By whom built.
Delaware.....	Battle ship....	1909. Oct. 23	<i>Knots.</i> 21	<i>Knots.</i> 21.56	1910. Feb. 15	.....	Newport News Co.
Michigan.....	.....do.....	June 10	18.5	18.79	1909. Aug. 31	.....	New York Shipbuilding Co.
Nebraska.....	.....do.....	1909. July 17	19	19.06	1907. May 31	.....	Moran Bros. Co.
North Dakota.....	.....do.....	1909. Nov. 5	21	21.01	1910. Apr. 11	.....	Fore River Co.
South Carolina.....	.....do.....	Aug. 25	18.5	18.86	1909. Nov. 5	.....	Wm. Cramp & Sons.
Montana.....	Armored cruiser.	1908. Apr. 4	22	22.26	1908. July 10	1910. Mar. 8	Newport News Co.
North Carolina.....	.....do.....	Feb. 15	22	22.48	Apr. 27	.....do.....	Do.
Birmingham.....	Scout cruiser..	Mar. 12	24	24.33	Apr. 10	1909. Dec. 16	Fore River Co.

Statement of data relative to trials and acceptances of vessels added to the navy since June 30, 1909—Continued.

Name.	Type.	Date of trial.	Speed required by contract.	Speed obtained on trial.	Date of preliminary acceptance.	Date of final acceptance.	By whom built.
Salem.....	Scout cruiser..	1908. June 25	<i>Knots.</i> 24	<i>Knots.</i> 25.95	1908. July 27	1910. Jan. 15	Fore River Co.
Flusser.....	Torpedo-boat destroyer.	1909. Sept. 6	28	30.41	1909. Sept. 29	1910. July 12	Bath Iron Works.
Lamson.....	do.....	Dec. 4	28	28.61	1910. Jan. 27		Wm. Cramp & Sons.
Faulding.....	do.....	1910. Sept. 2	29.5	32.80			Bath Iron Works.
Preston.....	do.....	1909. Nov. 11	28	29.18	1909. Dec. 21		New York Shipbuilding Co.
Reld.....	do.....	Oct. 9	28	31.82	Oct. 27	July 12	Bath Iron Works.
Roe.....	do.....	1910. July 16	29.5	29.60	1910. Sept. 15		Newport News Co.
Smith.....	do.....	1909. Sept. 23	28	28.35	1909. Nov. 24		Wm. Cramp & Sons.
Bonita.....	Submarine..	Sept. 20			Oct. 20	Sept. 21	Fore River Co.
Grayling.....	do.....	Sept. 21			Oct. 11	do.....	Do.
Narwhal.....	do.....	Aug. 19			Oct. 7	do.....	Do.
Salmon.....	do.....	1910. June 9 to 18.					Do.
Snapper.....	do.....	1909. Sept. 27			Dec. 22	Sept. 21	Do.
Stingray.....	do.....	Aug. 27			Oct. 16	do.....	Do.
Tarpon.....	do.....	Aug. 23			Oct. 14	do.....	Do.
Hector.....	Collier.....	Oct. 14 and 15.	12	12.87	Oct. 21	May 14	Maryland Steel Co.
Mars.....	do.....	Aug. 18 and 19.	12	12.65	Aug. 24	Mar. 7	Do.
Vulcan.....	do.....	Sept. 15 and 16.	12	12.82	Sept. 24	Apr. 25	Do.

Vessels dropped from the navy since June 30, 1909.

Name.	Type.	Status.	Disposition.	Appraised value.
Katahdin.....	Armored ram....	Regular navy.	Stricken from the navy list July 9, 1909.*	
Boston.....	Protected cruiser.	do.....	Stricken from the navy list July 12, 1910.	
Detroit.....	Unprotected cruiser.	do.....	do.....	
Concord.....	Gunboat.....	do.....	do.....	
Bennington.....	do.....	do.....	Stricken from the navy list Sept. 10, 1910.	
Winslow.....	Torpedo boat....	do.....	Stricken from the navy list July 12, 1910.	
Frolic.....	Converted yacht.	do.....	Transferred to the War Department May 21, 1909. Stricken from the navy list Aug. 26, 1909.	
Hornet.....	do.....	do.....	Stricken from the navy list Mar. 18, 1910.	
Siren.....	do.....	do.....	Stricken from the navy list Aug. 30, 1910.	
Enterprise.....	Wooden steam vessel.	do.....	Stricken from the navy list Aug. 6, 1909.	\$7,000
Eagre.....	Wooden sailing vessel.	do.....	Stricken from the navy list Sept. 10, 1910.	
Nezinscot.....	Tug.....	do.....	Foundered off Cape Ann Aug. 11, 1909.	
Nina.....	do.....	do.....	Declared lost by the Department from Mar. 15, 1910.	
Marcellus.....	Collier.....	do.....	Sunk in collision at sea Aug. 9, 1910, and stricken from the navy list Sept. 22, 1910.	

* To be used for experimental purposes

Vessels building for the increase of the navy are listed in the following tables, which include all those authorized by law, with the exception of 1 gunboat for the Great Lakes, authorized in 1898; 1 collier authorized in 1908; 4 submarine boats authorized in 1909; and 2 battle ships, 6 torpedo boat destroyers, 4 submarine boats, and 2 colliers appropriated for by the last Congress.

Vessels building under contract.

Name.	By whom building.	Estimate of—		Contract time.	Expiration of contract time.
		Degree of completion June 30, 1910.	Probable date of completion.		
BATTLE SHIPS.					
		<i>Per cent.</i>		<i>Months.</i>	
Utah.....	New York Shipbuilding Co....	80.0	Feb. 2, 1911	32	July 24, 1911
Wyoming.....	Wm. Cramp & Sons.....	28.4	July 2, 1912	32	June 14, 1912
Arkansas.....	New York Shipbuilding Co....	34.6	Apr. 10, 1912	32	May 25, 1912
TORPEDO-BOAT DESTROYERS.					
Faulding.....	Bath Iron Works.....	92.4	Sept. 29, 1910	24	Sept. 29, 1910
Drayton.....	do.....	86.1	Dec. 22, 1910	24	Do.
Roe.....	Newport News Shipbuilding Co.....	92.3	Sept. 15, 1910	24	Oct. 12, 1910
Terry.....	do.....	89.7	Dec. 21, 1910	24	Do.
Perkins.....	Fore River Shipbuilding Co....	86.8	Dec. 13, 1910	23	Sept. 1, 1910
Sterett.....	do.....	83.8	Feb. 7, 1911	24	Oct. 1, 1910
McCall.....	New York Shipbuilding Co....	85.4	Oct. 14, 1910	24	Oct. 5, 1910
Burrows.....	do.....	85.2	Nov. 14, 1910	24	Do.
Warrington.....	Wm. Cramp & Sons.....	74.4	Apr. 1, 1911	24	Oct. 1,
Mayrant.....	do.....	79.1	Apr. 4, 1911	24	Do. 1910
Monaghan.....	Newport News Shipbuilding Co.....	26.7	Nov. 23, 1911	24	June 23, 1911
Tripp.....	Bath Iron Works.....	49.9	Aug. 4, 1911	24	June 15, 1911
Walke.....	Fore River Shipbuilding Co....	39.1	Aug. 23, 1911	24	June 29, 1911
Ammen.....	New York Shipbuilding Co....	48.5	Apr. 18, 1911	22	Apr. 18, 1911
Patterson.....	Wm. Cramp & Sons.....	33.0	Oct. 2, 1911	24	June 14, 1911
SUBMARINE TORPEDO BOATS.					
Salmon.....	Fore River Shipbuilding Co....	97.4	Sept. 17, 1910	25	Dec. 23, 1909
Carp.....	Union Iron Works.....	58.6	July 11, 1911	27	June 5, 1911
Barracuda.....	do.....	58.6	July 5, 1911	27	Do.
Pickrel.....	Moran Co.....	53.1	Oct. 30, 1911	29	Aug. 5, 1911
Skate.....	do.....	53.1	do.....	29	Do.
Skipjack.....	Fore River Shipbuilding Co....	45.3	Aug. 6, 1911	26	Aug. 3, 1911
Sturgeon.....	do.....	43.7	Aug. 15, 1911	26	Do.
Thrasher.....	Wm. Cramp & Sons.....	6.4	July 21, 1912	30	Oct. 24, 1911
Tuna.....	Newport News Shipbuilding Co.....	28.3	July 6, 1912	28	Aug. 21, 1911
Seal.....	do.....	51.2	Mar. 10, 1912	27	May 3, 1910
COLLIERS.					
Cyclops.....	Wm. Cramp & Sons.....	79.3	Nov. 30, 1910	20	Oct. 3, 1910
Neptune.....	Maryland Steel Co.....	34.9	Aug. 26, 1911	20	June 22, 1911

Vessels building at navy-yards.

Name.	Where building.	Estimate of—		Constructional period.	Expiration of constructional period.
		Degree of completion June 30, 1910.	Probable date of completion.		
BATTLE SHIP.					
Florida.....	Navy-yard, New York, N. Y..	<i>Per cent.</i> 68.8	July 21, 1911	<i>Months.</i> .....	.....

•Building under agreement.

VESSELS LAUNCHED SINCE JUNE 30, 1909.

The following is a list of vessels launched since June 30, 1909, together with the date of launching:

Name.	Launched.	Name.	Launched.
Florida.....	May 12, 1910	Preston.....	July 14, 1909
Utah.....	Dec. 23, 1909	Reid.....	Aug. 17, 1909
Amma.....	Sept. 20, 1910	Roe.....	July 24, 1909
Burrows.....	June 23, 1910	Sterett.....	May 12, 1910
Drayton.....	Aug. 22, 1910	Terry.....	Aug. 21, 1909
Flusser.....	July 20, 1909	Warrington.....	June 18, 1910
McCall.....	June 4, 1910	Salmon.....	Mar. 12, 1910
Mayrant.....	Apr. 23, 1910	Cyclops.....	May 7, 1910
Pauding.....	Apr. 12, 1910	Hector.....	July 3, 1909
Perkins.....	Apr. 9, 1910		

NEW VESSELS AUTHORIZED.

BATTLE SHIPS

The plans and specifications for first-class battle ships Nos. 34 and 35, authorized by act of Congress approved June 24, 1910, were completed, and the circular signed by the Acting Secretary of the Navy, September 27, 1910, and issued to bidders upon request thereafter.

Bids for the construction of one of these vessels will be opened at the department December 1, 1910.

The navy-yard, New York, N. Y., has been designated as the yard at which one of these vessels will be built.

TORPEDO-BOAT DESTROYERS.

The plans and specifications for torpedo-boat destroyers Nos. 37 to 42, authorized by act of Congress approved June 24, 1910, were completed, and the circular signed by the Secretary of the Navy August 13, 1910, and issued to bidders September 1, 1910.

Bids for the construction of these vessels will be opened at the department November 8, 1910.

COLLIERS.

Plans and specifications for two fleet colliers authorized by act of Congress approved June 24, 1910, were completed, and the circular signed by the Secretary of the Navy, August 16, 1910, and issued to bidders upon request thereafter.

Bids for the construction of these colliers will be opened at the department December 1, 1910.

SUBMARINE TORPEDO BOATS.

The circular of the four submarine torpedo boats authorized by act of Congress approved June 24, 1910, is in course of preparation, but the Department has signified its intention to delay its issuance until the completion of the preliminary trials of certain submarines now building and the receipt of additional data from the submarine fleet in commission.

Circular defining the chief characteristics of submarine torpedo boats Nos. 28 to 31, inclusive, authorized by act of Congress approved March 3, 1909, was signed by the Secretary of the Navy January 22, 1910, and issued to bidders upon request thereafter.

Bids for the construction of these submarines were opened at the Department April 1, 1910, and contracts will be awarded as follows:

- No. 28 to Electric Boat Co. at a price of \$491,000.
- No. 29 to Electric Boat Co. at a price of \$491,000.
- No. 30 to Electric Boat Co. at a price of \$491,000.
- No. 31 to Lake Torpedo Boat Co. at a price of \$455,000.

Progress of work on vessels under construction.

[Taken from reports of superintending constructors.]

Name of vessel.	Name of superintending constructor.	Contract signed.	Expiration of contract period.	Contract time extended to—	Lines laid.	First hull material ordered.	Keel laid.	First frame erected.	First large casting received.
Michigan.	J. H. Linnard.	July 20, 1906	Nov. 20, 1909		Nov. 9, 1906	Aug. 11, 1906	Dec. 17, 1906	Jan. 22, 1907	Apr. 17, 1907
South Carolina.	E. Snow.	July 21, 1906	Dec. 21, 1909		Aug. 18, 1906	Aug. 14, 1906	Dec. 18, 1906	Jan. 28, 1907	Jan. 14, 1907
Delaware.	T. G. Roberts.	Aug. 6, 1907	June 6, 1910		Sept. 14, 1907	Aug. 12, 1907	Nov. 11, 1907	Dec. 31, 1907	Jan. 20, 1908
North Dakota.	H. G. Gillmor.	do.	Aug. 21, 1910	July 18, 1910	Aug. 28, 1907	do.	Dec. 16, 1907	Dec. 16, 1907	Jan. 29, 1908
Florida.	W. J. Baxter.	do.	do.	do.	Nov. 27, 1908	Nov. 2, 1908	Mar. 9, 1909	Mar. 9, 1909	Mar. 6, 1909
Utah.	J. G. Tawressey.	Nov. 24, 1908	July 24, 1911		Dec. 8, 1908	Mar. 15, 1909	Mar. 15, 1909	Apr. 17, 1909	Apr. 17, 1909
Arkansas.	E. Snow.	Sept. 25, 1909	May 25, 1912		Dec. 30, 1909	Sept. 22, 1909	Jan. 28, 1910	Jan. 28, 1910	May 9, 1910
Wyoming.	E. Snow.	Oct. 14, 1909	June 14, 1912		Oct. 30, 1909	Sept. 14, 1909	Feb. 9, 1910	Feb. 15, 1910	Apr. 4, 1910
Stingray.	H. G. Gillmor.	Nov. 19, 1907	July 19, 1909	July 30, 1909	Jan. 4, 1908	Nov. 27, 1907	Mar. 17, 1908	Mar. 23, 1908	Mar. 21, 1908
Tarpon.	do.	do.	do.	do.	do.	do.	do.	do.	do.
Bonita.	do.	do.	Sept. 19, 1909	Sept. 30, 1909	do.	do.	do.	Mar. 24, 1908	Mar. 27, 1908
Snapper.	do.	do.	Dec. 27, 1909	Dec. 27, 1909	do.	do.	do.	do.	Mar. 24, 1908
Narwhal.	do.	Nov. 23, 1907	Nov. 23, 1909	Dec. 1, 1909	Jan. 18, 1908	do.	Apr. 6, 1908	Apr. 30, 1908	Mar. 14, 1908
Grayling.	do.	do.	do.	do.	do.	do.	do.	do.	Mar. 28, 1908
Salmou.	do.	do.	Dec. 23, 1909	Dec. 31, 1909	do.	do.	do.	May 2, 1908	Apr. 6, 1908
Carp.	R. Washburn.	Mar. 5, 1900	June 5, 1911		June 2, 1909	Apr. 26, 1909	Aug. 23, 1909	Aug. 31, 1909	Mar. 14, 1910
Burroughs.	do.	do.	do.	do.	do.	do.	do.	do.	Feb. 23, 1910
Pickrel.	T. F. Rubin.	do.	Aug. 5, 1911		June 30, 1909	Apr. 15, 1909	Aug. 17, 1909	Sept. 16, 1909	Apr. 20, 1910
Skate.	do.	do.	do.	do.	do.	do.	do.	do.	do.
Skipjack.	H. G. Gillmor and L. Bankson.	June 3, 1909	Aug. 3, 1911		Oct. 14, 1909	June 29, 1909	Dec. 22, 1909	Jan. 10, 1910	Apr. 22, 1910
Sturgeon.	do.	do.	do.	do.	do.	do.	do.	do.	do.
Thresher.	E. Snow.	Apr. 24, 1909	Oct. 24, 1911		July 7, 1909	June 13, 1909	Oct. 20, 1909	Oct. 27, 1909	Dec. 14, 1909
Tuna.	T. G. Roberts.	Apr. 21, 1909	Aug. 21, 1911		Aug. 31, 1909	Apr. 22, 1909	Feb. 2, 1909	Mar. 1, 1909	Oct. 28, 1909
Seal.	do.	Feb. 3, 1908	May 3, 1910		Dec. 24, 1908	June 26, 1908	May 12, 1907	Mar. 1, 1909	May 4, 1909
Papasco.	A. W. Stahl.	do.	do.		Sept. 15, 1907	Oct. 10, 1907	Mar. 18, 1908	Mar. 24, 1908	Mar. 28, 1908
Smith.	E. Snow.	Oct. 10, 1907	Oct. 10, 1909	Nov. 24, 1909	do.	do.	do.	Apr. 25, 1908	do.
Lamson.	do.	do.	Jan. 27, 1910	Dec. 21, 1909	Dec. 19, 1907	Nov. 9, 1907	Apr. 28, 1908	Apr. 30, 1908	June 1, 1908
Preston.	J. H. Linnard.	Sept. 28, 1907	Sept. 28, 1909		Apr. 4, 1906	Dec. 21, 1907	Aug. 3, 1908	Aug. 26, 1908	Oct. 19, 1908
Flusser.	J. A. Spliman.	do.	do.		do.	do.	do.	Aug. 27, 1908	Nov. 17, 1908
Held.	do.	do.	Sept. 29, 1910		Feb. 15, 1909	Oct. 23, 1908	July 24, 1909	July 28, 1909	Sept. 16, 1909
Paulding.	do.	do.	do.		do.	do.	Aug. 19, 1909	Aug. 23, 1909	Sept. 17, 1909
Drayton.	do.	do.	do.		do.	do.	Jan. 18, 1909	Feb. 5, 1909	Sept. 1, 1909
Ice.	T. G. Roberts.	Oct. 12, 1908	Oct. 12, 1910		Sept. 26, 1908	Oct. 8, 1908	Mar. 18, 1909	Feb. 1, 1909	Mar. 1, 1909
Cherry.	do.	do.	do.		do.	do.	do.	do.	do.
Perkins.	H. G. Gillmor and L. Bankson.	Oct. 1, 1908	Sept. 1, 1910		Oct. 17, 1908	Oct. 30, 1908	Mar. 22, 1909	Apr. 2, 1909	Mar. 23, 1909
Stewart.	do.	do.	Oct. 1, 1910		do.	do.	do.	do.	do.
McCall.	J. G. Tawressey.	Oct. 5, 1908	Oct. 5, 1910		Oct. 30, 1908	Oct. 14, 1908	June 8, 1909	June 11, 1909	May 6, 1909
Burrows.	do.	do.	do.		do.	do.	June 19, 1909	June 19, 1909	June 21, 1909

Date of agreement.

Progress of work on vessels under construction—Continued.

Name of vessel.	Name of superintending constructor.	Contract signed.	Expiration of contract period.	Contract time extended to—	Lines failed.	First hull material ordered.	Keel laid.	First frame erected.	First large casting received.
Warrington.....	E. Snow.....	Oct. 1, 1908	Oct. 1, 1910	.....	Oct. 8, 1908	Oct. 7, 1908	June 21, 1909	June 24, 1909	Jan. 16, 1909
Mayrant.....	.....do.....	.....do.....	.....do.....	.....	.....do.....	.....do.....	Apr. 22, 1909	May 4, 1909	Apr. 2, 1909
Monaghan.....	T. G. Roberts.....	June 23, 1911	June 23, 1911	.....	Oct. 16, 1909	July 8, 1909	June 1, 1910	June 2, 1910	Jan. 18, 1910
Tripe.....	I. S. Seward.....	June 23, 1909	June 23, 1911	.....	June 3, 1909	June 24, 1909	Apr. 12, 1910	Apr. 13, 1910	Apr. 26, 1910
Walke.....	H. G. Billnor and L. Ranken.....	June 29, 1909	June 29, 1911	.....	June 29, 1909	July 14, 1909	Mar. 5, 1910	Mar. 9, 1910	Feb. 11, 1910
Annen.....	J. G. Tawressey.....	June 18, 1909	Apr. 18, 1911	.....	June 18, 1909	June 23, 1909	Mar. 29, 1910	Apr. 12, 1910	Dec. 4, 1909
Paterson.....	E. Snow.....	June 14, 1909	June 14, 1911	.....	Aug. 20, 1909	June 30, 1909	Apr. 27, 1910	Apr. 28, 1910	Apr. 23, 1910
Promethheus.....	H. A. Evans.....	.....	.....	.....	Oct. 9, 1906	Oct. 4, 1906	Oct. 18, 1907	Nov. 6, 1907	May 6, 1907
Vestal.....	W. J. Baxter.....	.....	.....	.....	Aug. 29, 1906	Oct. 9, 1906	Mar. 25, 1907	Mar. 26, 1907	Mar. 22, 1907
Cyclops.....	E. Snow.....	Feb. 3, 1909	Oct. 3, 1910	.....	Apr. 1, 1909	Apr. 17, 1909	June 2, 1909	July 1, 1909	Aug. 11, 1909
Vulcan.....	J. H. Linnard.....	.....	.....	.....	Sept. 16, 1908	Sept. 12, 1908	Oct. 5, 1908	Nov. 17, 1908	Oct. 30, 1908
Mars.....	.....do.....	.....do.....	.....do.....	.....	.....do.....	.....do.....	.....do.....	Nov. 16, 1908	Oct. 20, 1908
Hector.....	.....do.....	.....do.....	.....do.....	.....	.....do.....	.....do.....	.....do.....	Nov. 19, 1908	Nov. 7, 1908
Neptune.....	S. F. Smith.....	Sept. 23, 1909	May 23, 1911	June 23, 1911	Dec. 1, 1909	Oct. 28, 1909	Mar. 23, 1910	Apr. 11, 1910	May 3, 1910
Name of vessel.	First large casting erected.	First armor plate fitted.	First compartment tested.	Vessel launched.	Dock trial.	Official trial.	Estimated degree of completion June 30, 1910.	Vessel delivered to Government.	Date of first commission.
Michigan.....	May 13, 1907	Nov. 8, 1907	July 20, 1907	May 20, 1908	Mar. 22, 1906	June 9 and 10, 1906	.....	Aug. 31, 1909	Jan. 4, 1910
South Carolina.....	Apr. 19, 1907	July 22, 1907	Aug. 16, 1908	July 11, 1908	Aug. 5, 1909	Aug. 24, 1909	.....	Nov. 5, 1909	Mar. 1, 1910
Delaware.....	Apr. 18, 1908	July 7, 1908	June 23, 1909	Feb. 6, 1909	Sept. 7 to 10, 1909	Oct. 23, 1909	.....	Feb. 15, 1910	Apr. 4, 1910
North Dakota.....	Mar. 13, 1908	May 23, 1908	Apr. 21, 1908	Nov. 10, 1906	Oct. 25, 1909	Nov. 4 to 8, 1906	.....	Apr. 11, 1910	Apr. 11, 1910
Florida.....	Apr. 17, 1909	Sept. 23, 1909	Aug. 25, 1909	May 12, 1910	.....	.....	88.8	.....	.....
Utah.....	May 13, 1909	Aug. 25, 1909	June 14, 1909	Dec. 23, 1909	.....	.....	80.0	.....	.....
Arkansas.....	June 9, 1910	June 21, 1910	May 18, 1910	.....	.....	.....	34.6	.....	.....
Wyoming.....	June 17, 1910	.....	.....	.....	.....	.....	28.4	.....	.....
Stigraay.....	May 25, 1908	.....	Aug. 5, 1908	Apr. 8, 1909	May 3, 1909	Aug. 3 to Sept. 7, 1909	.....	Oct. 16, 1909	Nov. 23, 1909
Tarpon.....	June 2, 1908	.....	Aug. 24, 1908	.....do.....	May 10, 1909	Aug. 3 to 24, 1909	.....	Oct. 14, 1909	Do.
Bonita.....	June 15, 1908	.....	Oct. 3, 1908	June 17, 1909	Aug. 31, 1909	Sept. 15 to 25, 1909	.....	Oct. 20, 1909	Do.
Snapper.....	July 8, 1908	.....	Nov. 3, 1908	June 16, 1909	Sept. 9, 1909	Sept. 20 to 30, 1909	.....	Dec. 22, 1909	Feb. 2, 1910
Narwhal.....	June 29, 1908	.....	Sept. 18, 1908	Apr. 8, 1909	May 5, 1909	Aug. 3 to Sept. 5, 1909	.....	Oct. 7, 1909	Nov. 23, 1909

	July 6, 1908	Oct. 24, 1908	June 16, 1909	Aug. 12, 1909	Sept. 15 to 25, 1909	97.4	Oct. 11, 1909	Do.
Grayling.....	July 14, 1908	Nov. 27, 1908	Mar. 12, 1908	Apr. 8, 1910	Sept. 15 to 25, 1909		Sept. 1, 1910	Sept. 8, 1910
Salmon.....	Apr. 18, 1910	Apr. 4, 1910		Apr. 8, 1910	June 9 to 18, 1910	58.6		
Card.....	Apr. 16, 1910	Apr. 31, 1910				53.1		
Barracuda.....	May 17, 1910	May 5, 1910				45.3		
Pickarel.....	May 19, 1910	Apr. 15, 1910				43.7		
Skane.....	May 25, 1910	Apr. 18, 1910				6.4		
Shipjack.....	Nov. 29, 1909	Jan. 25, 1910				28.3		
Sturson.....	May 11, 1909					51.2		
Thrasher.....	Apr. 22, 1908	Nov. 6, 1908	June 29, 1908	May 12, 1909	Sept. 22, 1909		Nov. 24, 1909	July 28, 1909
Seal.....	Apr. 14, 1908	Oct. 14, 1908	June 16, 1909	Oct. 19, 1909	Dec. 1, 1909		Jan. 27, 1910	Nov. 26, 1909
Palapaco.....	May 24, 1908	Aug. 31, 1908	July 14, 1909	Oct. 19, 1909	Nov. 11 to 14, 1909		Dec. 21, 1909	Feb. 10, 1910
Smith.....	Oct. 31, 1908	Feb. 4, 1909	July 20, 1909	Aug. 10, 1909	Sept. 1 to 6, 1909		Sept. 29, 1909	Oct. 28, 1909
Lamson.....	Nov. 28, 1908	Feb. 17, 1909	Aug. 17, 1909	Sept. 18, 1909	Oct. 6 to 9, 1909		Oct. 27, 1909	Dec. 3, 1909
Fraslon.....	Oct. 22, 1909	Nov. 30, 1909	Apr. 12, 1910			92.4	Sept. 27, 1910	
Flusser.....	Nov. 1, 1909	Mar. 15, 1910	Aug. 22, 1910			86.1	Sept. 15, 1910	
Reil.....	Mar. 11, 1909	May 15, 1909	July 24, 1909	June 26, 1910	July 12 to 16, 1910	92.3	Sept. 15, 1910	Sept. 17, 1910
Building.....	Mar. 20, 1909	July 14, 1909	Aug. 21, 1909			80.7		
Drayton.....	May 14, 1909	Sept. 14, 1909	Apr. 9, 1910			86.8		
Roe.....	May 15, 1909	Oct. 20, 1909	May 12, 1910			83.8		
Terry.....	Sept. 10, 1909	Feb. 10, 1910	June 4, 1910			85.4		
Fortina.....	Sept. 14, 1909	Mar. 21, 1910	June 23, 1910			85.2		
Sierst.....	July 9, 1909	Dec. 21, 1909	June 18, 1910			74.4		
McCall.....	May 13, 1909	Dec. 1, 1909	Apr. 23, 1910			79.1		
Burrows.....	May 19, 1910	Sept. 20, 1910				46.9		
Warrington.....	May 16, 1910	June 1, 1908	Dec. 5, 1908	July 26 to 30, 1898		39.1		
Mayrant.....	May 18, 1910	Oct. 5, 1907	May 19, 1908			38.5		
Monaghan.....	June 23, 1910	June 1, 1908	Dec. 5, 1908			33.0		
Tripps.....	Dec. 14, 1907	Oct. 5, 1907	May 15, 1909					
Walke.....	Apr. 23, 1907	Sept. 20, 1910	Apr. 10, 1909					
Aminon.....	Sept. 9, 1909	Oct. 19, 1909	May 7, 1910			79.3	Sept. 24, 1909	Oct. 2, 1909
Fatterson.....	Nov. 18, 1908	Feb. 5, 1909	May 15, 1909	July 15, 1909	Sept. 15 and 16, 1909		Aug. 24, 1909	Aug. 26, 1909
Promethides.....	Nov. 2, 1908	do	Apr. 10, 1909	May 28, 1909	Aug. 18 and 19, 1909		Oct. 21, 1909	Oct. 22, 1909
Vestal.....	Dec. 2, 1908	Feb. 25, 1909	July 3, 1909			34.9		
Credois.....	June 29, 1910							
Vulcan.....								
Mars.....								
Hector.....								
Neptune.....								

• Date of agreement.

LIST OF VESSELS OF THE UNITED STATES NAVY.

ARMORED STEEL VESSELS—

Name and official number.	By whom and where built or building.	Condition or service June 30, 1910.	Ship, fully equipped ready for sea, normal stores, ammunition, and coal.					
			Length between perpendiculars ^a	Breadth on load water line.	Mean draft.	Displacement (normal).	Tons per inch immersion at normal draft.	
			<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Tons.</i>	<i>Tons.</i>	
1 Alabama (8) b..	Wm. Cramp & Sons, Philadelphia, Pa.	Navy-yard, New York. ^c	368 0	72 2½	23 6	11,552	47.75	1
2 Arkansas (33) b.	New York S. B. Co., Camden, N. J.	Building, 35% complete.	554 0	93 2½	28 6	26,000	88.50	2
3 Connecticut (18) b.	Navy-yard, New York.	Atlantic Fleet...	450 0	76 10	24 6	16,000	63.14	3
4 Delaware (28)...	Newport News S. B. Co., Newport, Va.	Atlantic Fleet...	510 0	85 2½	26 11	20,000	71.70	4
5 Florida (30) b...	Navy-yard, New York.	Building, 69% complete.	510 0	88 2½	28 6	21,825	74.00	5
6 Georgia (15) b..	Bath Iron Works, Bath, Me.	Atlantic Fleet...	435 0	76 2½	23 9	14,948	60.95	6
7 Idaho (24)	Wm. Cramp & Sons, Philadelphia, Pa.	Atlantic Fleet...	375 0	77 0	24 8	13,000	51.43	7
8 Illinois (7) b....	Newport News S. B. Co., Newport, Va.	Navy-yard, Boston. ^e	368 0	72 2½	23 6	11,552	47.75	8
9 Indiana (1).....	Wm. Cramp & Sons, Philadelphia, Pa.	Naval Academy Practice Sqdn.	348 0	69 3	24 0	10,288	42.75	9
10 Iowa (4) b.....	Wm. Cramp & Sons, Philadelphia, Pa.	Naval Academy Practice Sqdn.	360 0	72 2½	24 0	11,346	46.00	10
11 Kansas (21)....	New York S. B. Co., Camden, N. J.	Atlantic Fleet...	450 0	76 10	24 6	16,000	63.14	11
12 Kearsarge (5) b.	Newport News S. B. Co., Newport, Va.	Navy-yard, Philadelphia. ^c	368 0	72 2½	23 6	11,520	47.35	12
13 Kentucky (6) b.	Newport News S. B. Co., Newport, Va.	Navy-yard, Norfolk. ^e	368 0	72 2½	23 6	11,520	47.35	13
14 Louisiana (19) b	Newport News S. B. Co., Newport, Va.	Atlantic Fleet...	450 0	76 10	24 6	16,000	63.14	14
15 Maine (10).....	Wm. Cramp & Sons, Philadelphia, Pa.	Navy-yard, Portsmouth. ^e	388 0	72 2½	23 10	12,500	50.75	15
16 Massachusetts (2).	Wm. Cramp & Sons, Philadelphia, Pa.	Naval Academy Practice Sqdn.	348 0	69 3	24 0	10,288	42.75	16
17 Michigan (27)...	New York S. B. Co., Camden, N. J.	Atlantic Fleet...	450 0	80 2½	24 6	16,000	64.20	17
18 Minnesota (22) b	Newport News S. B. Co., Newport, Va.	Atlantic Fleet...	450 0	76 10	24 6	16,000	63.14	18
19 Mississippi (23).	Wm. Cramp & Sons, Philadelphia, Pa.	Atlantic Fleet...	375 0	77 0	24 8	13,000	51.43	19
20 Missouri (11) b..	Newport News S. B. Co., Newport, Va.	Navy-yard, Boston. ^m	388 0	72 2½	23 11	12,500	50.35	20
21 Nebraska (14) b.	Moran Bros., Seattle, Wash.	Atlantic Fleet...	435 0	76 2½	23 9	14,948	60.95	21
22 New Hampshire (25).	New York S. B. Co., Camden, N. J.	Atlantic Fleet...	450 0	76 10	24 6	16,000	63.14	22
23 New Jersey (16) (b).	Fore River S. & E. Co., Quincy, Mass.	Navy-yard, Boston. ^m	435 0	76 2½	23 9	14,948	60.95	23
24 N. Dakota (29).	Fore River S. B. Co., Quincy, Mass.	Atlantic Fleet...	510 0	85 2½	26 11	20,000	71.70	24
25 Ohio (12) b.....	Union Iron Works, San Francisco, Cal.	Navy-yard, New York. ^c	388 0	72 2½	23 7	12,500	51.25	25
26 Oregon (3).....	Union Iron Works, San Francisco, Cal.	Navy-yard, Puget Sound. ^c	348 0	69 3	24 0	10,288	42.75	26
27 Rhode Isd. (17) b	Fore River S. & E. Co., Quincy, Mass.	Atlantic Fleet...	435 0	76 2½	23 9	14,948	60.95	27
28 South Carolina (26).	Wm. Cramp & Sons, Philadelphia, Pa.	Atlantic Fleet...	450 0	80 2½	24 6	16,000	64.20	28
29 Utah (31) b.....	New York S. B. Co., Camden, N. J.	Building, 80% complete.	510 0	88 2½	28 6	21,825	74.00	29
30 Vermont (20) b.	Fore River S. & E. Co., Quincy, Mass.	Atlantic Fleet...	450 0	76 10	24 6	16,000	63.14	30
31 Virginia (13) b..	Newport News S. B. Co., Newport, Va.	Atlantic Fleet...	435 0	76 2½	23 9	14,948	60.95	31
32 Wisconsin (9) b.	Union Iron Works, San Francisco, Cal.	Navy-yard, Portsmouth. ^m	368 0	72 2½	23 6	11,552	47.75	32
33 Wyoming (32) b	Wm. Cramp & Sons, Philadelphia, Pa.	Building, 28% complete.	554 0	93 2½	28 6	26,000	88.50	33
34 Number 34 b....	.....	Design being prepared.	565 0	95 2½	28 6	27,000	91.80	34
35 Number 35 b....	.....	Design being prepared.	565 0	95 2½	28 6	27,000	91.80	35
Total normal displacement.....						555,796		

^a Length on designed L. W. L.^b Fitted as a flagship.^c Out of commission.^d Two-thirds full supply of ammunition and stores.^e Two-thirds full supply of stores and fuel, and full supply of ammunition.^f Estimated.^g Shaft horsepower.

FIRST-CLASS BATTLE SHIPS.

	Length over all.		Full-load displacement.	Speed on trial.	I. H. P. of propelling machinery and its auxiliaries on trial.		Displacement on trial.	Bunker capacity to 6 inches below beams (43 cubic feet to the ton).	Name and official number.	
	<i>Ft.</i>	<i>in.</i>			<i>Tons.</i>	<i>Knots.</i>					Tons.	Tons.
1	374	0	12,150	17.01	11,207	11,570	1,275	Alabama (8).....	1	
2	562	0	27,243	<i>f</i> 20.50	<i>f</i> 28,000	<i>f</i> 26,000	<i>f</i> 2,500	Arkansas (33).....	2	
3	450	4	17,666	18.78	19,819	16,220	<i>†</i> 2,452	Connecticut (18).....	3	
4	518	9	<i>‡</i> 22,000	21.56	29,043	20,099	<i>†</i> 2,668	Delaware (28).....	4	
5	521	6	23,033	<i>f</i> 20.75	<i>f</i> 28,000	<i>f</i> 21,825	<i>f</i> 2,500	Florida (30).....	5	
6	441	3	16,094	19.26	25,088	14,963	<i>†</i> 1,967	Georgia (15).....	6	
7	382	0	14,465	17.12	14,010	13,093	<i>†</i> 1,841	Idaho (24).....	7	
8	375	4	12,150	17.45	12,757	11,540	1,275	Illinois (7).....	8	
9	350	11	11,688	15.55	9,607	10,225	1,500	Indiana (1).....	9	
10	362	5	12,647	17.09	11,933	11,363	1,650	Iowa (4).....	10	
11	456	4	17,650	18.09	19,545	16,000	<i>†</i> 2,388	Kansas (21).....	11	
12	375	4	12,320	16.82	11,788	11,550	1,500	Kearsarge (5).....	12	
13	375	4	12,320	16.90	12,179	11,550	1,500	Kentucky (6).....	13	
14	456	4	17,666	18.82	20,748	16,000	<i>†</i> 2,452	Louisiana (19).....	14	
15	393	11	13,500	18.00	15,603	12,370	1,875	Maine (10).....	15	
16	350	11	11,688	16.21	10,240	10,300	1,475	Massachusetts (2).....	16	
17	452	9	17,617	18.79	16,310	16,064	<i>f</i> 2,200	Michigan (27).....	17	
18	456	4	17,650	18.85	20,235	16,002	<i>†</i> 2,364	Minnesota (22).....	18	
19	382	0	14,465	17.11	13,607	13,000	<i>†</i> 1,841	Mississippi (23).....	19	
20	393	11	13,500	18.15	15,845	12,300	<i>†</i> 1,887	Missouri (11).....	20	
21	441	3	16,094	19.06	21,283	14,865	<i>†</i> 1,923	Nebraska (14).....	21	
22	456	4	17,784	18.16	17,100	16,145	<i>†</i> 2,592	New Hampshire (25).....	22	
23	441	3	16,094	19.18	23,089	14,930	<i>†</i> 1,944	New Jersey (16).....	23	
24	518	9	<i>‡</i> 22,000	21.01	<i>§</i> 32,307	20,020	<i>†</i> 2,641	North Dakota (29).....	24	
25	393	10	13,500	17.82	16,220	12,500	<i>†</i> 2,215	Ohio (12).....	25	
26	351	2	11,688	16.79	11,037	10,242	1,450	Oregon (3).....	26	
27	441	3	16,094	19.01	20,310	14,920	<i>†</i> 2,008	Rhode Island (17).....	27	
28	452	9	17,617	18.86	18,357	16,136	<i>f</i> 2,200	South Carolina (26).....	28	
29	321	6	23,033	<i>f</i> 20.75	<i>f</i> 28,000	<i>f</i> 21,825	<i>f</i> 2,500	Utah (31).....	29	
30	456	4	17,650	18.33	17,982	16,000	<i>†</i> 2,428	Vermont (20).....	30	
31	441	3	16,094	19.01	22,841	14,980	<i>†</i> 1,924	Virginia (13).....	31	
32	373	10	12,150	17.17	12,452	11,565	<i>†</i> 1,331	Wisconsin (9).....	32	
33	562	0	27,243	<i>f</i> 20.50	<i>f</i> 28,000	<i>f</i> 26,000	<i>f</i> 2,500	Wyoming (32).....	33	
34	573	0	28,367	<i>f</i> 21.00	<i>f</i> 32,000	<i>f</i> 27,000	<i>f</i> 2,850	Number 34.....	34	
35	573	0	28,367	<i>f</i> 21.00	<i>f</i> 32,000	<i>f</i> 27,000	<i>f</i> 2,850	Number 35.....	35	

[‡] Exclusive of 400 tons oil fuel.
[†] Calculated to bottom of beams for steaming competition trials.

[‡] Exclusive of 380 tons oil fuel.

[†] Full supply ammunition and stores, normal coal in reserve.

[‡] Length on designer's L. W. L.

ARMORED STEEL VESSELS—

Name and official number.	Batteries.				Torpedo tubes.
	Main.		Secondary.		
	In turrets.	Broadside.			
1 Alabama (8).....	4 13" B. L. R.	14 6" R. F.	16 6-pdr., 2 1-pdr. R. F., 2 3" F., 4 30 cal. A.		1
2 Arkansas (33).....	12 12" B. L. R.	21 5" R. F.	4 3-pdr., 2 1-pdr. S. A., 2 3" F., 2 30 cal. M.	2 21", submerged.	2
3 Connecticut (18).....	4 12" B. L. R. 8 8" B. L. R.	12 7" B. L. R.	20 3" R. F., 4 3-pdr., 4 1-pdr., 2 3" F., 4 30 cal. A.	4 21", submerged.	3
4 Delaware (28).....	10 12" B. L. R.	14 5" R. F.	23-pdr. S. A., 4 1-pdr. S. A., 2 3" F., 2 30 cal. M.	2 21", submerged.	4
5 Florida (30).....	10 12" B. L. R.	16 5" R. F.	4 3-pdr. S. A., 2 1-pdr. S. A., 2 3" F., 2 30 cal. M.	2 21", submerged.	5
6 Georgia (15).....	4 12" B. L. R. 8 8" B. L. R.	12 6" R. F.	12 3" R. F., 8 3-pdr. S. A., 2 3" F., 2 1-pdr. R. F., 4 30 cal. A., 2 30 cal. M.	4 21", submerged.	6
7 Idaho (24).....	4 12" B. L. R. 8 8" B. L. R.	8 7" B. L. R.	12 3" R. F., 6 3-pdr. S. A., 2 1-pdr., 2 3" F., 6 30 cal. A.	2 21", submerged.	7
8 Illinois (7).....	4 13" B. L. R.	14 6" R. F.	10 6-pdr., 2 1-pdr., 2 3" F., 4 30 cal. A.		8
9 Indiana (1).....	4 13" B. L. R. 8 8" B. L. R.		12 3" R. F., 4 6-pdr. R. F., 2 1-pdr. R. F., 1 3" F., 2 30 cal. A.		9
10 Iowa (4).....	4 12" B. L. R. 8 8" B. L. R.	10 4" R. F.	4 6-pdr. R. F., 2 1-pdr. R. F., 2 3" F., 4 30 cal. A.		10
11 Kansas (21).....	4 12" B. L. R. 8 8" B. L. R.	12 7" B. L. R.	20 3" R. F., 12 3-pdr. S. A., 2 1-pdr., 2 3" F., 2 30 cal. A.	4 21", submerged.	11
12 Kearsarge (5).....	4 13" B. L. R. 8 8" B. L. R.	14 5" R. F.	12 6-pdr. R. F., 2 1-pdr., 2 3" F., 4 30 cal. A.	11 8", above water.	12
13 Kentucky (6).....	4 13" B. L. R. 8 8" B. L. R.	14 5" R. F.	12 6-pdr. R. F., 4 1-pdr., 2 3" F., 4 30 cal. A.		13
14 Louisiana (19).....	4 12" B. L. R. 8 8" B. L. R.	12 7" B. L. R.	20 3" R. F., 4 6-pdr. R. F., 2 1-pdr. A., 2 3" F., 2 30 cal. M.	4 21", submerged.	14
15 Maine (10).....	4 12" B. L. R.	16 6" R. F.	6 3" R. F., 4 3-pdr. R. F., 2 1-pdr., 2 3" F., 2 30 cal. A., 2 30 cal. M.	2 18", submerged.	15
16 Massachusetts (2).....	4 13" B. L. R. 8 8" B. L. R.		12 3" R. F., 4 6-pdr. R. F., 2 1-pdr., 2 3" F., 2 30 cal. A.		16
17 Michigan (27).....	8 12" B. L. R.		22 3" S. A., 2 3-pdr. S. A., 8 1-pdr. S. A., 2 3" F., 2 30 cal. A., 2 30 cal. M.	2 21", submerged.	17
18 Minnesota (22).....	4 12" B. L. R. 8 8" B. L. R.	12 7" B. L. R.	20 3" R. F., 12 3-pdr. S. A., 2 1-pdr. A., 2 3" F., 2 30 cal. M.	4 21", submerged.	18
19 Mississippi (23).....	4 12" B. L. R. 8 8" B. L. R.	8 7" B. L. R.	12 3" R. F., 6 3-pdr. S. A., 2 1-pdr., 2 3" F., 6 30 cal. A.	2 21", submerged.	19
20 Missouri (11).....	4 12" B. L. R.	16 6" R. F.	6 3" R. F., 4 3-pdr. S. A., 4 1-pdr., 2 3" F.	2 18", submerged.	20
21 Nebraska (14).....	4 12" B. L. R. 8 8" B. L. R.	12 6" R. F.	12 3" R. F., 2 3" F., 4 30 cal. A.	4 21", submerged.	21
22 New Hampshire (25).....	4 12" B. L. R. 8 8" B. L. R.	12 7" B. L. R.	20 3" R. F., 4 3-pdr. S. A., 2 1-pdr. S. A., 2 3" F., 2 30 cal. A.	4 21", submerged.	22
23 New Jersey (16).....	4 12" B. L. R. 8 8" B. L. R.	12 6" R. F.	12 3" R. F., 4 3-pdr. R. F., 2 1-pdr. R. F., 2 3" F., 4 30 cal. A.	4 21", submerged.	23
24 North Dakota (29).....	10 12" B. L. R.	14 5" R. F.	2 3-pdr. S. A., 4 1-pdr. S. A., 2 3" F., 2 30 cal. M.	2 21", submerged.	24
25 Ohio (12).....	4 12" B. L. R.	16 6" R. F.	6 3" R. F., 2 1-pdr., 2 3" F., 2 30 cal. A.	2 18", submerged.	25
26 Oregon (3).....	4 13" B. L. R. 8 8" B. L. R.		12 3" R. F., 4 6-pdr. R. F., 2 1-pdr. R. F., 1 3" F., 4 30 cal. A.		26
27 Rhode Island (17).....	4 12" B. L. R. 8 8" B. L. R.	12 6" R. F.	12 3" R. F., 2 1-pdr. R. F., 2 3" F., 2 30 cal. A.	4 21", submerged.	27
28 South Carolina (26).....	8 12" B. L. R.		22 3" S. A., 2 3-pdr. S. A., 8 1-pdr. S. A., 2 3" F., 2 30 cal. A., 2 30 cal. M.	2 21", submerged.	28
29 Utah (31).....	10 12" B. L. R.	16 5" R. F.	4 3-pdr. S. A., 2 1-pdr. S. A., 2 3" F., 2 30 cal. M.	2 21", submerged.	29
30 Vermont (20).....	4 12" B. L. R. 8 8" B. L. R.	12 7" B. L. R.	20 3" R. F., 12 3-pdr. S. A., 4 1-pdr., 2 3" F., 6 30 cal. A., 2 30 cal. M.	4 21", submerged.	30
31 Virginia (13).....	4 12" B. L. R. 8 8" B. L. R.	12 6" R. F.	12 3" R. F., 12 3-pdr. R. F., 2 3" F., 6 30 cal. A., 2 30 cal. M.	4 21", submerged.	31
32 Wisconsin (9).....	4 13" B. L. R.	14 6" R. F.	4 3" R. F., 4 6-pdr. R. F., 2 1-pdr., 2 3" F., 4 30 cal. A.	11 8", above water.	32
33 Wyoming (32).....	12 12" B. L. R.	21 5" R. F.	4 3-pdr., 2 1-pdr. S. A., 2 3" F., 2 30 cal. M.	2 21", submerged.	33
34 Number 34.....	10 14" B. L. R.	21 5" R. F.	4 3-pdr., 2 1-pdr. S. A., 2 3" F., 2 30 cal. M.	4 21", submerged.	34
35 Number 35.....	10 14" B. L. R.	21 5" R. F.	4 3-pdr., 2 1-pdr. S. A., 2 3" F., 2 30 cal. M.	4 21", submerged.	35

• 4 8" in superposed turrets.

FIRST-CLASS BATTLE SHIPS—Continued.

	Armor.					Protective deck. Total thickness.		Name and official number.
	Water-line belt amidships.	Turrets.		Barbettes.		At ends.	Amid- ships.	
		Size.	Thickness.	Size.	Thick- ness.			
	<i>Inches.</i>	<i>Inches.</i>	<i>In.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		
1	{Top 16½, bottom 9½, water line 13½.	13	14	13	15-10	{For'd 2½-3. Aft 2½-4.	2½	Alabama (8)..... 1
2								Arkansas (33)..... 2
3	{Top 11, bottom 9, water line 11.	12	12-8 6½-6	12	10-7½ 8	{For'd 3. Aft 3.	1½-3	Connecticut (18).... 3
4								Delaware (28)..... 4
5								Florida (30)..... 5
6	{Top 11, bottom 8, water line 11.	12-8 8	12-8-6 6½-6	12	10-7½ 8	{For'd 3. Aft 3.	1½-3	Georgia (15)..... 6
7	{Top 9, bottom 9, water line 9.	12	12-8 6½-6	12	10-7½ 8	{For'd 3. Aft 3.	1½-3	Idaho (24)..... 7
8	{Top 16½, bottom 9½, water line 13½.	13	14	13	15-10	{For'd 2½-3. Aft 2½-4.	2½	Illinois (7)..... 8
9	{Top 18, bottom 8½, water line 18.	13	15	13	17	{For'd 3. Aft 3.	2½	Indiana (1)..... 9
10	{Top 14, bottom 7, water line 14.	12	17-15	12	15-12½	{For'd 3. Aft 3.	2½	Iowa (4)..... 10
11	{Top 9, bottom 9, water line 9.	12	12-8 6½-6	12	10-7½ 8	{For'd 3. Aft 3.	1½-3	Kansas (21)..... 11
12	{Top 16½, bottom 9½, water line 13½.	13-8	17-15-11-9	13	15-12½	{For'd 2½-3. Aft 2½-5.	2½	Kearsarge (5)..... 12
13	{Top 16½, bottom 9½, water line 13½.	13-8	17-15-11-9	13	15-12½	{For'd 2½-3. Aft 2½-5.	2½	Kentucky (6)..... 13
14	{Top 11, bottom 9, water line 11.	12	12-8 6½-6	12	10-7½ 8	{For'd 3. Aft 3.	1½-3	Louisiana (19).... 14
15	{Top 11, bottom 7½, water line 11.	12	12-11	12	12-8	{For'd 2½-2½. Aft 2½-4.	2½	Maine (10)..... 15
16	{Top 18, bottom 8½, water line 18.	13	15	13	17	{For'd 3. Aft 3.	2½	Massachusetts (2) 16
17	{Top 11, bottom 9, water line 10½.	12	12-8	12	10-8	{For'd 1½. Aft 3.	1½	Michigan (27).... 17
18	{Top 9, bottom 9, water line 9.	12	12-8 6½-6	12	10-7½ 8	{For'd 3. Aft 3.	1½-3	Minnesota (22).... 18
19	{Top 9, bottom 9, water line 9.	12	12-8 6½-6	12	10-7½ 8	{For'd 3. Aft 3.	1½-3	Mississippi (23).... 19
20	{Top 11, bottom 7½, water line 11.	12	12-11	12	12-8	{For'd 2½-3. Aft 2½-4.	2½	Missouri (11).... 20
21	{Top 11, bottom 8, water line 11.	12-8 8	12-8-6 6½-6	12	10-7½ 8	{For'd 3. Aft 3.	1½-3	Nebraska (14).... 21
22	{Top 9, bottom 9, water line 9.	12	12-8 6½-6	12	11-7½-6 8	{For'd 3. Aft 3.	1½-3	New Hampshire (25). 22
23	{Top 11, bottom 8, water line 11.	12-8 8	12-8-6 6½-6	12	10-7½ 8	{For'd 3. Aft 3.	1½-3	New Jersey (16).... 23
24								North Dakota (29) 24
25	{Top 11, bottom 7½, water line 11.	12	12-11	12	12-8	{For'd 2½-2½. Aft 2½-4.	2½	Ohio (12)..... 25
26	{Top 18, bottom 8, water line 18.	13	15	13	17	{For'd 3. Aft 3.	2½	Oregon (3)..... 26
27	{Top 11, bottom 8, water line 11.	12-8 8	12-8-6 6½-6	12	10-7½ 8	{For'd 3. Aft 3.	1½-3	Rhode Island (17) 27
28	{Top 11, bottom 9, water line 10½.	12	12-8	12	10-8	{For'd 1½. Aft 3.	1½	South Carolina (26). 28
29								Utah (31)..... 29
30	{Top 9, bottom 9, water line 9.	12	12-8 6½-6	12	10-7½ 8	{For'd 3. Aft 3.	1½-3	Vermont (20).... 30
31	{Top 11, bottom 8, water line 11.	12-8 8	12-8-6 6½-6	12	10-7½ 8	{For'd 3. Aft 3.	1½-3	Virginia (13).... 31
32	{Top 16½, bottom 9½, water line 13½.	13	14	13	15-10	{For'd 2½-3. Aft 2½-4.	2½	Wisconsin (9).... 32
33								Wyoming (32).... 33
34								Number 34..... 34
35								Number 35..... 35

* In way of magazines 12' to 10'.

ARMORED STEEL VESSELS—

	Name and official number.	Rig and number of funnels.	Type of boilers. (Engines.) ^a	Complement. ^b		Net tonnage for Suez Canal.	Contract price of hull and machinery.	Date of act authorizing the building.	
				Officers.	Men.				
1	Alabama (8)	Two military masts. Two funnels, abreast	Scotch	34	679	4,228	\$2,650,000	June 10, 1896	1
2	Arkansas (33)	Two cage masts Two funnels	Babcock & Wilcox	e62	978	.....	4,675,000	Mar. 3, 1909	2
3	Connecticut (18)	Three funnels Two cage masts	Babcock & Wilcox	e57	957	5,877	\$4,600,000	July 1, 1902	3
4	Delaware (28)	Two cage masts Two funnels	Babcock & Wilcox	e52	886	.....	3,987,000	June 29, 1906	4
5	Florida (30)	Two cage masts Two funnels	Babcock & Wilcox	e60	888	.....	46,000,000	May 13, 1908	5
6	Georgia (15)	Two cage masts Three funnels	Nielause	e52	880	5,316	3,590,000	Mar. 3, 1899	6
7	Idaho (24)	One military mast One cage mast Two funnels	Babcock & Wilcox	e47	749	.....	2,999,500	Mar. 3, 1903	7
8	Illinois (7)	Two military masts Two funnels, abreast	Scotch	34	677	4,270	2,595,000	June 10, 1896	8
9	Indiana (1)	One military mast Two funnels	Babcock & Wilcox	e34	619	3,204	3,063,000	June 30, 1890	9
10	Iowa (4)	One military mast Two funnels	Scotch	34	646	3,806	3,010,000	July 19, 1892	10
11	Kansas (21)	Two cage masts Three funnels	Babcock & Wilcox	e49	901	5,899	4,165,000	Mar. 3, 1903	11
12	Kearsarge (5)	Two military masts Two funnels	Scotch	24	691	4,205	2,250,000	Mar. 2, 1895	12
13	Kentucky (6)	Two military masts Two funnels	Scotch	34	664	4,209	2,250,000	Mar. 2, 1895	13
14	Louisiana (19)	Two cage masts Three funnels	Babcock & Wilcox	e52	901	5,896	3,990,000	July 1, 1902	14
15	Maine (10)	Two cage masts Three funnels	Babcock & Wilcox	e44	767	4,660	2,885,000	May 4, 1898	15
16	Massachusetts (2)	One military mast One cage mast Two funnels	Babcock & Wilcox	e34	619	3,204	3,063,000	June 30, 1890	16
17	Michigan (27)	Two cage masts Two funnels	Babcock & Wilcox	e49	751	.....	3,585,000	Mar. 3, 1905	17
18	Minnesota (22)	One military mast One cage mast Three funnels	Babcock & Wilcox	e52	926	5,882	4,110,000	Mar. 3, 1903	18
19	Mississippi (23)	One military mast One cage mast Two funnels	Babcock & Wilcox	e47	749	.....	2,999,500	Mar. 3, 1903	19
20	Missouri (11)	One military mast One cage mast Three funnels	Thornycroft	e44	767	4,460	2,885,000	May 4, 1898	20
21	Nebraska (14)	Two cage masts Three funnels	Babcock & Wilcox	e49	851	5,305	3,733,600	Mar. 3, 1899	21
22	New Hampshire (25)	Two cage masts Three funnels	Babcock & Wilcox	e49	901	.....	3,748,000	Apr. 27, 1904	22
23	New Jersey (16)	Two cage masts Three funnels	Babcock & Wilcox	e49	851	5,252	3,495,000	June 7, 1900	23
24	North Dakota (29)	Two cage masts Two funnels	Babcock & Wilcox	e52	886	.....	4,377,000	Mar. 2, 1907	24
25	Ohio (12)	One military mast One cage mast Three funnels	Thornycroft	e47	765	4,810	2,899,000	May 4, 1898	25
26	Oregon (3)	One military mast Two funnels	Scotch	34	671	3,354	3,222,810	June 30, 1890	26
27	Rhode Island (17)	Two cage masts Three funnels	Babcock & Wilcox	e49	851	5,252	3,495,000	June 7, 1900	27
28	South Carolina (26)	Two cage masts Two funnels	Babcock & Wilcox	e49	751	.....	3,540,000	Mar. 3, 1905	28
29	Utah (31)	Two cage masts Two funnels	Babcock & Wilcox	e60	853	.....	3,946,000	May 13, 1908	29
30	Vermont (20)	Two cage masts Three funnels	Babcock & Wilcox	e49	901	5,861	4,179,000	Mar. 3, 1903	30
31	Virginia (13)	One military mast One cage mast Three funnels	Nielause	e49	876	5,272	3,590,000	Mar. 3, 1899	31
32	Wisconsin (9)	One military mast One cage mast Two funnels, abreast	Scotch	34	677	4,257	2,674,950	June 10, 1896	32
33	Wyoming (32)	Two cage masts Two funnels	Water tube	e62	976	.....	4,450,000	Mar. 3, 1906	33
34	Number 34	Two cage masts Two funnels . . . . .	.....	e63	1,009	.....	46,000,000	June 24, 1910	34
35	Number 35	Two cage masts Two funnels . . . . .	.....	e63	1,009	.....	46,000,000	June 24, 1910	35

^a North Dakota fitted with twin-screw turbines, Curtis type; Utah, Florida, Arkansas, and Wyoming fitted with four-screw turbines, Parsons type. All others, excepting No. 34 and No. 35, twin-screw vertical triple expansion.

FIRST-CLASS BATTLE SHIPS—Concluded.

	Contract signed.	Keel laid.	Launched.	Contract date of completion.	Date of preliminary acceptance.	Date of first and latest commission.	Name and official number.	
1	Sept. 24, 1896	Dec. 1, 1896	May 18, 1898	Sept. 24, 1899	Oct. 22, 1900	Oct. 16, 1900	Alabama (8).....	1
2	Sept. 25, 1909	Jan. 25, 1910	.....	May 25, 1912	.....	.....	Arkansas (33)...	2
3	.....	Mar. 10, 1903	Sept. 29, 1904	Mar. 15, 1906	.....	Sept. 29, 1906	Connecticut (18).	3
4	Aug. 6, 1907	Nov. 11, 1907	Feb. 6, 1909	Aug. 6, 1910	Feb. 15, 1910	Apr. 4, 1910	Delaware (28)...	4
5	.....	Mar. 9, 1909	May 12, 1910	.....	.....	.....	Florida (30).....	5
6	Feb. 18, 1901	Aug. 31, 1901	Oct. 11, 1904	Feb. 18, 1904	Sept. 21, 1906	Sept. 24, 1906	Georgia (15).....	6
7	Jan. 25, 1904	May 12, 1904	Dec. 9, 1905	May 25, 1907	Mar. 26, 1908	Apr. 1, 1908	Idaho (24).....	7
8	Sept. 26, 1896	Feb. 10, 1897	Oct. 4, 1898	Sept. 26, 1899	Sept. 16, 1901	Sept. 16, 1901	Illinois (7).....	8
9	Nov. 19, 1890	May 7, 1891	Feb. 28, 1893	Nov. 19, 1893	Nov. 19, 1895	{Nov. 20, 1895 May 10, 1910	Indiana (1).....	9
10	Feb. 11, 1893	Aug. 5, 1893	Mar. 28, 1896	Feb. 11, 1896	June 15, 1897	{June 16, 1897 May 2, 1910	Iowa (4).....	10
11	June 16, 1903	Feb. 10, 1904	Aug. 12, 1905	Dec. 16, 1906	Apr. 5, 1907	Apr. 18, 1907	Kansas (21).....	11
12	Jan. 2, 1896	June 30, 1896	Mar. 24, 1898	Jan. 2, 1899	Nov. 8, 1899	Feb. 20, 1900	Kearsarge (5)....	12
13	Jan. 2, 1896	June 30, 1896	Mar. 24, 1898	Jan. 2, 1899	Dec. 30, 1899	May 15, 1900	Kentucky (6)...	13
14	Oct. 15, 1902	Feb. 7, 1903	Aug. 27, 1904	Mar. 15, 1906	May 21, 1906	June 2, 1906	Louisiana (19)...	14
15	Oct. 1, 1898	Feb. 15, 1899	July 27, 1901	June 1, 1901	Dec. 29, 1902	Dec. 29, 1902	Maine (10).....	15
16	Nov. 18, 1890	June 25, 1891	June 10, 1893	Nov. 18, 1893	May 29, 1896	{June 10, 1896 Apr. 28, 1910	Massachusetts (2)	16
17	July 20, 1906	Dec. 17, 1906	May 26, 1908	Nov. 20, 1909	Aug. 31, 1909	Jan. 4, 1910	Michigan (27)....	17
18	June 20, 1903	Oct. 27, 1903	Apr. 8, 1905	Dec. 20, 1906	Mar. 4, 1907	Mar. 9, 1907	Minnesota (22)...	18
19	Jan. 25, 1904	May 12, 1904	Sept. 30, 1905	Mar. 25, 1907	Jan. 22, 1908	Feb. 1, 1908	Mississippi (23)...	19
20	Dec. 30, 1898	Feb. 7, 1900	Dec. 28, 1901	Aug. 30, 1901	Dec. 1, 1903	Dec. 1, 1903	Missouri (11)....	20
21	Mar. 7, 1901	July 4, 1902	Oct. 7, 1904	Mar. 7, 1904	May 31, 1907	July 1, 1907	Nebraska (14)...	21
22	Dec. 27, 1904	May 1, 1905	June 30, 1906	Feb. 27, 1908	Mar. 14, 1908	Mar. 19, 1908	{New Hampshire (25).	22
23	Feb. 15, 1901	Apr. 2, 1902	Nov. 10, 1904	Feb. 15, 1904	May 12, 1906	May 12, 1906	New Jersey (16).	23
24	Aug. 6, 1907	Dec. 16, 1907	Nov. 10, 1908	June 21, 1910	Apr. 11, 1910	Apr. 11, 1910	{North Dakota (29).	24
25	Oct. 5, 1898	Apr. 22, 1899	May 18, 1901	June 5, 1901	Sept. 10, 1904	Oct. 4, 1904	Ohio (12).....	25
26	Nov. 19, 1890	Nov. 19, 1891	Oct. 26, 1893	Nov. 19, 1893	June 26, 1896	July 15, 1896	Oregon (3).....	26
27	Feb. 15, 1901	May 1, 1902	May 17, 1904	Feb. 15, 1904	Feb. 12, 1906	Feb. 19, 1906	Rhode Island (17)	27
28	July 21, 1906	Dec. 18, 1906	July 11, 1908	Dec. 21, 1909	Nov. 5, 1909	Mar. 1, 1910	S. Carolina (26)...	28
29	Nov. 24, 1908	Mar. 15, 1909	Dec. 23, 1909	July 24, 1911	.....	.....	Utah (31).....	29
30	June 20, 1903	May 21, 1904	Aug. 31, 1905	Dec. 20, 1906	Feb. 11, 1907	Mar. 4, 1907	Vermont (20)....	30
31	Feb. 15, 1901	May 21, 1902	Apr. 5, 1904	Feb. 15, 1904	May 5, 1906	May 7, 1906	Virginia (13).....	31
32	Sept. 19, 1896	Feb. 9, 1897	Nov. 26, 1898	Sept. 19, 1899	Jan. 17, 1901	{Feb. 4, 1901 Apr. 1, 1908	Wisconsin (9)...	32
33	Oct. 14, 1909	Feb. 9, 1910	.....	June 14, 1912	.....	.....	Wyoming (32)...	33
34	.....	.....	.....	.....	.....	.....	Number 34.....	34
35	.....	.....	.....	.....	.....	.....	Number 35.....	35

† Furnished by Bureau of Navigation, 1910.

• Flagship.

‡ Limit of cost.

• Act of Congress approved June 29, 1906.

ARMORED STEEL VESSELS—

Name.	By whom and where built or building.	Condition or service June 30, 1910.	Ship, fully equipped ready for sea, full stores and ammunition, normal coal.					
			Length between perpendiculars. ^a	Breadth on load water line.	Mean draft.	Displacement (normal).	Tons per inch immersion at normal draft.	
			<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Tons.</i>	<i>Tons.</i>	
1 Texas.....	Navy-yard, Norfolk, Va.	Receiving ship, navy-yard, Charleston, S. C.	301 4	64 1	22 6	6,315	30.22	1
Batteries.								
Name.	Main.		Secondary.	Torpedo tubes.				
	In turrets.	Broadside.						
1 Texas.....	2 12" B. L. R.	6 6" R. F.....	14 6-pdr. R. F., 3 1-pdr. A.....		1			
Name.	Rig and number of funnels.	Type of boilers and engines.	Complement. ^b		Net tonnage for Suez Canal.	Contract price of hull and machinery.		
			Officers.	Men.				
1 Texas.....	Two military masts..... One funnel.....	Scotch. Vertical, triple expansion, twin screw.	30	478	c 2,429	d \$2,500,000	1	

^a Length on designed L. W. L.^b Furnished by Bureau of Navigation, 1910.

SECOND-CLASS BATTLE SHIP.

Length over all.	Full-load displacement.	Speed on trial.	I. H. P. of propelling machinery and its auxiliaries on trial.	Displacement on trial.	Bunker capacity to 6 inches below beams (43 cubic feet to the ton).	Name.
<i>Ft. in.</i>	<i>Tons.</i>	<i>Knots.</i>		<i>Tons.</i>	<i>Tons.</i>	
1 308 10	6,665	17.80	8,507	.....	850	Texas..... 1

Armor.					Protective deck. Total thickness.		Name.
Water-line belt amidships.	Turrets.		Redoubt.		At ends.	Amidships.	
	Size.	Thick-ness.	Size.	Thick-ness.			
<i>Inches.</i> { Top 12, bottom 6, water line } 12.	<i>Inches.</i> 12	<i>Inches.</i> 12	<i>Inches.</i> 12	<i>Inches.</i> 12	<i>Inches.</i> { Forward, 2-3 } { Aft, 2-3. }	<i>Inches.</i> 2	Texas... 1

Date of act authorizing the building.	Contract signed.	Keel laid.	Launched.	Contract date of completion.	Date of preliminary acceptance	Date of first and latest commission.	Name.
1 Aug. 3, 1886.	June 1, 1889	June 28, 1892	.....	.....	{ Aug. 15, 1895 } { Sept. 1, 1908 }	} Texas... 1

* Subject to possible change.

† Limit of cost.

ARMORED STEEL VESSELS—

Name and official number.	By whom and where built or building.	Condition or service June 30, 1910.	Ship, fully equipped ready for sea, normal stores, ammunition, and coal.					
			Length between perpendiculars ^c	Breadth on load water line.	Mean draft.	Displacement (normal).	Tons per inch immersion at normal draft.	
			<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Tons.</i>	<i>Tons.</i>	
1 Brooklyn (3) ^b	Wm. Cramp & Sons, Philadelphia, Pa.	Navy-yard, Philadelphia. ^c	490 6	64 8	24 0	49,215	41.80	1
2 California (6) ^b	Union Iron Works, San Francisco, Cal.	Pacific Fleet..	502 0	69 6½	24 1	413,680	57.80	2
3 Colorado (7) ^b	Wm. Cramp & Sons, Philadelphia, Pa.	Pacific Fleet..	502 0	69 6½	24 1	413,680	57.80	3
4 Maryland (8) ^b	Newport News S. B. Co., Newp't N., Va.	Pacific Fleet..	502 0	69 6½	24 1	413,680	57.80	4
5 Montana (13).....	Newport News S. B. Co., Newp't N., Va.	Special service squadron.	502 0	72 10½	25 0	414,500	59.70	5
6 New York (2) ^b	Wm. Cramp & Sons, Philadelphia, Pa.	Asiatic Fleet..	380 6	64 10	23 3	48,150	39.00	6
7 N. Carolina (12)...	Newport News S. B. Co., Newp't N., Va.	Special service squadron.	502 0	72 10½	25 0	414,500	59.70	7
8 Pennsylvania (4) ^b .	Wm. Cramp & Sons, Philadelphia, Pa.	Pacific Fleet..	502 0	69 6½	24 1	413,680	57.80	8
9 S. Dakota (9) ^b	Union Iron Works, San Francisco, Cal.	Pacific Fleet..	502 0	69 6½	24 1	413,680	57.80	9
10 Tennessee (10) ^b ...	Wm. Cramp & Sons, Philadelphia, Pa.	Special service squadron.	502 0	72 10½	25 0	414,500	59.70	10
11 Washington (11) ^b ..	New York S. B. Co., Camden, N. J.	Pacific Fleet..	502 0	72 10½	25 0	414,500	59.70	11
12 W. Virginia (5) ^b ..	Newport News S. B. Co., Newp't N., Va.	Pacific Fleet..	502 0	69 6½	24 1	413,680	57.80	12
Total normal displacement.....						157,445		

^a Length on designed L. W. L.^b Fitted as a flagship.^c Out of commission.^d Full supply ammunition and stores, normal coal.

ARMORED CRUISERS.

	Length over all.		Full load displacement.		Speed on trial.		I. H. P. of propelling machinery and its auxiliaries on trial.		Displacement on trial.		Bunker capacity to 6 inches below beams (43 cubic feet to the ton).		Name and official number.	
	<i>Ft. in.</i>	<i>Tons.</i>	<i>Knots.</i>			<i>Tons.</i>	<i>Tons.</i>			<i>Tons.</i>				
1	402 7	10,068	21.91	18,425	8,150	1,350						Brooklyn (3).....	1	
2	503 11	15,138	22.20	29,381	13,750	/ 2,185						California (6).....	2	
3	504 0	15,138	22.24	26,837	13,780	/ 1,929						Colorado (7).....	3	
4	503 11	15,138	22.41	28,059	13,749	/ 2,054						Maryland (8).....	4	
5	504 5	15,981	22.26	27,938	14,531	/ 2,113						Montana (13).....	5	
6	384 0	8,900	21.00	17,075	8,480	1,075						New York (2).....	6	
7	504 5	15,981	22.48	29,785	14,518	/ 2,113						North Carolina (12).....	7	
8	504 0	15,138	22.44	28,600	13,810	/ 1,946						Pennsylvania (4).....	8	
9	503 11	15,138	22.24	28,543	13,750	/ 2,185						South Dakota (9).....	9	
10	504 5	15,712	22.16	26,963	14,500	/ 1,974						Tennessee (10).....	10	
11	504 5	15,712	22.27	27,152	14,500	/ 2,015						Washington(11).....	11	
12	503 11	15,138	22.15	26,135	13,750	/ 2,054						West Virginia (5).....	12	

* Two-thirds full supply of ammunition and stores.

/ Calculated to bottom of beams for steaming competition trials.

ARMORED STEEL VESSELS—

Name and official number.	Batteries.				Torpedo tubes.
	Main.		Secondary.		
	In turrets.	Broadside.			
1 Brooklyn (3).....	8 8" B. L. R.....	12 5" R. F.....	12 6-pdr. R. F., 4 1-pdr. R. F., 2 3" F., 4 .30 cal. A., 1 .30 cal. M.		1
2 California (6).....	4 8" B. L. R.....	14 6" R. F.....	18 3" R. F., 4 3-pdr. S. A., 2 3" F., 4 .30 cal. A., 2 .30 cal. M.	2 18" submerged.	2
3 Colorado (7).....	4 8" B. L. R.....	14 6" R. F.....	18 3" R. F., 4 3-pdr. S. A., 2 1-pdr. R. F., 2 3" F., 4 .30 cal. A.	2 18" submerged.	3
4 Maryland (8).....	4 8" B. L. R.....	14 6" R. F.....	18 3" R. F., 4 3-pdr. S. A., 2 1-pdr. R. F., 2 3" F., 4 .30 cal. A.	2 18" submerged.	4
5 Montana (13).....	4 10" B. L. R.....	16 6" R. F.....	22 3" R. F., 4 6-pdr. S. A., 2 1-pdr. R. F., 2 3" F., 2 .30 cal. A., 2 .30 cal. M.	4 21" submerged.	5
6 New York (2).....	4 8" B. L. R.....	10 5" R. F.....	18 3" R. F., 4 3-pdr. R. F., 4 .30 cal. A.		6
7 North Carolina(12)	4 10" B. L. R.....	16 6" R. F.....	22 3" R. F., 4 6-pdr. S. A., 2 1-pdr. R. F., 2 3" F., 2 .30 cal. A., 2 .30 cal. M.	4 21" submerged.	7
8 Pennsylvania (4).....	4 8" B. L. R.....	14 6" R. F.....	18 3" R. F., 4 3-pdr. S. A., 2 1-pdr. R. F., 2 3" F., 4 .30 cal. A.	2 18" submerged.	8
9 South Dakota (9).....	4 8" B. L. R.....	14 6" R. F.....	18 3" R. F., 4 3-pdr. S. A., 2 1-pdr. R. F., 2 3" F., 4 .30 cal. A., 2 .30 cal. M.	2 18" submerged.	9
10 Tennessee (10).....	4 10" B. L. R.....	16 6" R. F.....	22 3" R. F., 4 3-pdr. S. A., 2 1-pdr. R. F., 2 3" F., 4 .30 cal. A., 2 .30 cal. M.	4 21" submerged.	10
11 Washington (11).....	4 10" B. L. R.....	16 6" R. F.....	22 3" R. F., 4 3-pdr. S. A., 2 1-pdr. A., 2 3" F., 4 .30 cal. A., 2 .30 cal. M.	4 21" submerged.	11
12 West Virginia (5).....	4 8" B. L. R.....	14 6" R. F.....	18 3" R. F., 4 3-pdr. S. A., 2 1-pdr. R. F., 2 3" F., 4 .30 cal. A.	2 18" submerged.	12

ARMORED STEEL VESSELS—

Name and official number.	Rig and number of funnels.	Type of boilers. (Engines.) ^a	Comple- ment. ^b		Net tonnage for Suez Canal.	Contract price of hull and machinery.	Date of act authorizing the building.	
			Off- cers.	Men.				
1 Brooklyn (3).....	Two military masts... Three funnels.....	Scotch.....	34	538	3,368	\$2,986,000	July 19, 1892	1
2 California (6).....	Two military masts... Four funnels.....	Babcock & Wilcox.....	48	837	4,050	3,800,000	Mar. 3, 1899	2
3 Colorado (7).....	Two military masts... Four funnels.....	Niclausse.....	41	837	4,000	3,780,000	June 7, 1900	3
4 Maryland (8).....	Two military masts... Four funnels.....	Babcock & Wilcox.....	41	837	3,953	3,775,000	June 7, 1900	4
5 Montana (13).....	Two military masts... Four funnels.....	Babcock & Wilcox.....	41	909	4,509	3,575,000	Apr. 27, 1904	5
6 New York (2).....	Three funnels.....	Babcock & Wilcox.....	34	482	2,838	2,985,000	Sept. 7, 1888	6
7 N. Carolina (12).....	Two military masts... Four funnels.....	Babcock & Wilcox.....	41	909	4,500	3,575,000	Apr. 27, 1904	7
8 Pennsylvania (4).....	Two military masts... Four funnels.....	Niclausse.....	41	837	4,000	3,890,000	Mar. 3, 1899	8
9 South Dakota (9).....	Two military masts... Four funnels.....	Babcock & Wilcox.....	41	837	4,050	3,750,000	July 7, 1900	9
10 Tennessee (10).....	Two military masts... Four funnels.....	Babcock & Wilcox.....	44	929	.....	4,035,000	July 1, 1902	10
11 Washington (11).....	Two military masts... Four funnels.....	Babcock & Wilcox.....	41	906	.....	4,035,000	July 1, 1902	11
12 West Virginia(5).....	Two military masts... Four funnels.....	Babcock & Wilcox.....	44	806	3,953	3,885,000	Mar. 3, 1899	12

^a All engines vertical triple expansion, twin screw. ^b Furnished by Bureau of Navigation, 1910.

ARMORED CRUISERS—Continued.

	Water-line belt amidships.	Armor.				Protective deck. Total thickness.		Name and official number.
		Turrets.		Barbettes.		At ends.	Amlt-ships.	
		Size.	Thick-ness.	Size.	Thick-ness.			
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		
1	{ Top 3, bottom 3, water line 3. }	8	5½	8	8-4	{ For'd 2½... Aft 2½... }	3-6	Brooklyn (3)..... 1
2	{ Top 6, bottom 5, water line 6. }	8	6½-6	8	6	{ For'd 4... Aft 4... }	1½-4	California (6)..... 2
3	{ Top 6, bottom 5, water line 6. }	8	6½-6	8	6	{ For'd 4... Aft 4... }	1½-4	Colorado (7)..... 3
4	{ Top 6, bottom 5, water line 6. }	8	6½-6	8	6	{ For'd 4... Aft 4... }	1½-4	Maryland (8)..... 4
5	{ Top 5, bottom 5, water line 5. }	10	9-7-5	10	8-6-4	{ For'd 3... Aft 3... }	1½-4	Montana (13)..... 5
6	{ Top 4, bottom 4, water line 4. }	8	6½-6	8	6-4	{ For'd 2½... Aft 2½... }	3-6	New York (2)..... 6
7	{ Top 5, bottom 5, water line 5. }	10	9-7-5	10	8-6-4	{ For'd 3... Aft 3... }	1½-4	North Carolina (12) 7
8	{ Top 6, bottom 5, water line 6. }	8	6½-6	8	6	{ For'd 4... Aft 4... }	1½-4	Pennsylvania (4) . 8
9	{ Top 6, bottom 5, water line 6. }	8	6½-6	8	6	{ For'd 4... Aft 4... }	1½-4	South Dakota (9).. 9
10	{ Top 5, bottom 5, water line 5. }	10	9-7-5	10	7-4	{ For'd 3... Aft 3... }	1½-4	Tennessee (10).... 10
11	{ Top 5, bottom 5, water line 5. }	10	9-7-5	10	7-4	{ For'd 3... Aft 3... }	1½-4	Washington (11).. 11
12	{ Top 6, bottom 5, water line 6. }	8	6½-6	8	6	{ For'd 4... Aft 4... }	1½-4	West Virginia (5).. 12

ARMORED CRUISERS—Concluded.

	Contract signed.	Keel laid.	Launched.	Contract date of completion.	Date of preliminary acceptance.	Date of first and latest commission.	Name and official number.
1	Feb. 11, 1893	Aug. 2, 1893	Oct. 2, 1893	Feb. 11, 1896	Dec. 1, 1896	{ Dec. 1, 1896 { Oct. 2, 1906	Brooklyn (3).... 1
2	Jan. 10, 1901	May 7, 1902	Apr. 28, 1904	Jan. 10, 1904	July 20, 1907	Aug. 1, 1907	California (6).... 2
3	Jan. 10, 1901	Apr. 25, 1901	Apr. 25, 1903	Jan. 10, 1904	Jan. 10, 1905	Jan. 19, 1905	Colorado (7)..... 3
4	Jan. 24, 1901	Oct. 29, 1901	Sept. 12, 1903	Jan. 24, 1904	Apr. 18, 1905	Apr. 18, 1905	Maryland (8).... 4
5	Jan. 3, 1905	Apr. 29, 1905	Dec. 15, 1906	Jan. 3, 1908	July 10, 1908	July 21, 1908	Montana (13).... 5
6	Aug. 28, 1890	Sept. 30, 1890	Dec. 2, 1891	Jan. 1, 1893	June 17, 1893	{ Aug. 1, 1893 { Apr. 1, 1910	New York (2).... 6
7	Jan. 3, 1905	Mar. 21, 1905	Oct. 6, 1906	Jan. 3, 1908	Apr. 27, 1908	May 7, 1908	N. Carolina (12). 7
8	Jan. 10, 1901	Aug. 7, 1901	Aug. 22, 1903	Jan. 10, 1904	Mar. 9, 1905	Mar. 9, 1905	Pennsylvania (4) 8
9	Jan. 10, 1901	Sept. 30, 1902	July 21, 1904	Jan. 10, 1904	Nov. 19, 1907	Jan. 27, 1908	South Dakota (9) 9
10	Feb. 9, 1903	June 20, 1903	Dec. 3, 1904	Aug. 9, 1906	July 11, 1906	July 17, 1906	Tennessee (10).. 10
11	Feb. 10, 1903	Sept. 23, 1903	Mar. 18, 1905	Aug. 10, 1906	July 30, 1906	Aug. 7, 1906	Washington (11) 11
12	Jan. 24, 1901	Sept. 16, 1901	Apr. 18, 1903	Jan. 24, 1904	Feb. 23, 1905	Feb. 23, 1905	West Virginia (5) 12

e Flagship.

d Subject to possible change.

ARMORED STEEL VESSELS—SINGLE

Name and official number.	By whom and where built or building.	Condition or service June 30, 1910.	Ship fully equipped ready for sea, normal stores, ammunition, and coal.					
			Length between perpendiculars. ^a	Breadth on load water line.	Mean draft.	Displacement (normal).	Tons per inch immersion at normal draft.	
1 Cheyenne (10) ^b	Union Iron Works, San Francisco, Cal.	Naval Militia, Washington.	<i>Ft. in.</i> 252 0	<i>Ft. in.</i> 50 0	<i>Ft. in.</i> 12 6	<i>Tons.</i> 3,225	<i>Tons.</i> 25.25	1
2 Ozark (7) <i>c</i>	Newport News S. B. Co., Newport News, Va.	Naval Militia, District of Columbia.	252 0	50 0	12 6	3,225	25.25	2
3 Tallahassee (9) ^d	Lewis Nixon, Elizabethport, N. J.	Navy-yard, Norfolk. ^e	252 0	50 0	12 6	3,225	25.25	3
4 Tonopah (8) <i>f</i> .	Bath Iron Works, Bath, Me.	Naval Militia, New Jersey.	252 0	50 0	12 6	3,225	25.25	4
Total normal displacement.....						12,900		

Name and official number.	Batteries.			
	Main.		Secondary.	Torpedo tubes.
	In turrets.	Broadside.		
1 Cheyenne (10).	2 12" B. L. R. . .	4 4" R. F. . . .	36-pdr. S. A., 41-pdr. A., 2.30 cal. A.	.....
2 Ozark (7)	2 12" B. L. R. . .	4 4" R. F. . . .	36-pdr. S. A., 61-pdr. A., 2.30 cal. A.	.....
3 Tallahassee (9)	2 12" B. L. R. . .	4 4" R. F. . . .	36-pdr. S. A., 61-pdr. A., 2.30 cal. A.	.....
4 Tonopah (8) . .	2 12" B. L. R. . .	4 4" R. F. . . .	36-pdr. S. A., 61-pdr. A., 2.30 cal. A.	.....

Name and official number.	Rig and number of funnels.	Type of boilers. (Engines.) ^f	Complement. ^g		Net tonnage for Suez Canal.	Contract price of hull and machinery.	Date of act authorizing the building.	
			Officers.	Men.				
1 Cheyenne (10).	{ One military mast... One funnel.....	{ Babcock & Wilcox.	13	209	.....	\$975,000	May 4, 1898	1
2 Ozark (7)	{ One military mast... One funnel.....	{ Thornycroft..	13	209	.....	960,000	May 4, 1898	2
3 Tallahassee (9)	{ One military mast... One funnel.....	{ Mosher.....	13	209	.....	925,000	May 4, 1898	3
4 Tonopah (8) . .	{ One military mast... One funnel.....	{ Niclausse.....	13	209	.....	962,000	May 4, 1898	4

^a Length on designed L. W. L.

^b Formerly Wyoming. Name changed Jan. 1, 1909.

^c Two-thirds full supply of ammunition and stores.

^d And 60,816 gallons of oil fuel.

^e Formerly Arkansas. Name changed Mar. 2, 1909.

^f Formerly Florida. Name changed June 20, 1908.

TURRET HARBOR-DEFENSE MONITORS.

	Length over all.	Full-load displacement.	Speed on trial.	I. H. P. of propelling machinery and its auxiliaries on trial.	Displacement on trial.	Bunker capacity to 6 inches below beams (43 cubic feet to the ton).	Name and official number.	
	<i>Ft. in.</i>	<i>Tons.</i>	<i>Knots.</i>		<i>Tons.</i>	<i>Tons.</i>		
1	255 1	3,356	11.80	2,359	3,230	129	Cheyenne (10).....	1
2	255 1	3,356	12.03	1,739	3,215	344	Ozark (7).....	2
3	255 1	3,356	12.40	2,336	3,225	355	Tallahassee (9).....	3
4	255 1	3,356	13.04	1,970	3,250	338	Tonopah (8).....	4

Armor.					Protective deck amidships. Total thickness.		Name and official number.
Water-line belt amidships.	Turrets.		Barbettes.		Flat.	Slope.	
	Size.	Thickness.	Size.	Thickness.			
<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	
1 Top 11 bottom 5, water line 8.	12	10-9	12	11-9	1½	.....	Cheyenne (10).. 1
2 Top 11, bottom 5, water line 8.	12	10-9	12	11-9	1½	.....	Ozark (7)..... 2
3 Top 11, bottom 5, water line 8.	12	10-9	12	11-9	1½	.....	Tallahassee (9) 3
4 Top 11, bottom 5, water line 8.	12	10-9	12	11-9	1½	.....	Tonopah (8).. 4

	Contract signed.	Keel laid.	Launched.	Contract date of completion.	Date of preliminary acceptance.	Date of first and latest commission.	Name and official number.
1	Oct. 5, 1898	Apr. 11, 1899	Sept. 8, 1900	Mar. 5, 1901	Dec. 1, 1902	{Dec. 8, 1902 July 11, 1910}	Cheyenne(10) 1
2	Oct. 11, 1898	Nov. 14, 1899	Nov. 10, 1900	Mar. 11, 1901	Sept. 8, 1902	Oct. 28, 1902	Ozark (7).... 2
3	Oct. 11, 1898	Jan. 23, 1899	Nov. 30, 1901	Mar. 11, 1901	May 26, 1903	{June 18, 1903 Aug. 1, 1910}	Tallahassee (9).... 3
4	Oct. 19, 1898	Apr. 17, 1899	Nov. 24, 1900	Mar. 19, 1901	Mar. 5, 1903	{Mar. 5, 1903 May 14, 1909}	Tonopah (8).. 4

g Formerly Nevada. Name changed Mar. 2, 1900.

h Out of commission.

i All engines vertical triple expansion, twin screw.

* Furnished by Bureau of Navigation, 1910.

NOTE.—The Canonius was stricken from the Navy List Jan. 5, 1904.

ARMORED VESSELS—DOUBLE

Name.	By whom and where built or building.	Condition or service June 30, 1910.	Ship fully equipped ready for sea, all stores on board. Normal coal supply.					Tons per inch immersion at normal draft.
			Length between perpendiculars. ^a	Breadth on load water line.	Mean draft.	Displacement (normal).	Tons.	
1 Amphitrite....	Harlan & Hollingsworth, Wilmington, Del., and navy-yard, Norfolk.	Naval Militia, Missouri.	<i>Ft. in.</i> 259 3	<i>Ft. in.</i> 55 4	<i>Ft. in.</i> 14 6	<i>Tons.</i> 3,990	<i>Tons.</i> 27.67	1
2 Miantonomoh.	John Roach, Chester, Pa., and navy-yard, New York.	Navy-yard, Philadelphia. ^b	260 3	55 4	14 6	3,990	27.67	2
3 Monadnock...	Continental Iron Works, Vallejo, Cal., and navy-yard, Mare Island.	Naval Station, Cavite. ^b	258 6	55 5	14 6	3,990	27.67	3
4 Monterey.....	Union Iron Works, San Francisco, Cal.	Asiatic Fleet ^c	256 0	59 0½	14 10	4,084	26.74	4
5 Puritan.....	John Roach, Chester, Pa., and navy-yard, New York.	Navy-yard, Norfolk. ^b	290 3	60 1½	18 0	6,060	33.64	5
6 Terror.....	Wm. Cramp & Sons, Philadelphia, Pa., and navy-yard, New York.	Navy-yard, Philadelphia. ^b	258 8	55 6	14 6	3,990	27.67	6
Total normal displacement.....						26,104		

Name.	Batteries.				Torpedo tubes.
	Main.		Secondary.		
	In turrets.	Broadside.			
1 Amphitrite.....	4 10" B. L. R.	2 4" R. F.	2 6-pdr. R. F., 2 3-pdr. R. F., 2 1-pdr. R. F., 1 .30 cal. A.		1
2 Miantonomoh.....	4 10" B. L. R.		2 6-pdr. R. F., 2 3-pdr. R. F.		2
3 Monadnock.....	4 10" B. L. R.	2 4" R. F.	5 6-pdr. R. F., 2 1-pdr. A.		3
4 Monterey.....	{ 2 12" B. L. R. 2 10" B. L. R. }		{ 6 6-pdr. R. F., 2 1-pdr. R. F., 2 .30 cal. A., 1 3" F. }		4
5 Puritan.....	4 12" B. L. R.	6 4" R. F.	6 6-pdr. R. F., 2 1-pdr. R. F., 2 .30 cal. M.		5
6 Terror.....	4 10" B. L. R.	4 4" R. F.	2 6-pdr. R. F., 2 3-pdr. R. F., 2 1-pdr. R. F.		6

^a Length on designed L. W. L.^b Out of commission.

TURRET MONITORS.

	Length over all.	Full-load displacement.	Speed on trial.	I. H. P. of propelling machinery and its auxiliaries on trial.	Displacement on trial.	Bunker capacity to 6 inches below beams (43 cubic feet to the ton).	Name.	
	<i>Ft. in.</i>	<i>Tons.</i>	<i>Knots.</i>		<i>Tons.</i>	<i>Tons.</i>		
1	262 9	.....	10.50	1,600	3,990	271	Amphitrite.....	1
2	263 1	.....	10.50	1,426	3,990	250	Miantonomoh.....	2
3	62 3	.....	12.00	3,000	3,990	386	Monadnock.....	3
4	260 11	.....	13.60	5,104	4,084	206	Monterey.....	4
5	296 3	.....	12.40	4 3,700	6,060	306	Puritan.....	5
6	263 1	.....	10.50	4 1,600	3,990	276	Terror.....	6

Armor.					Protective deck amidships. Total thickness.		Name.
Water-line belt amidships.	Turrets.		Barbettes.		Flat.	Slope.	
	Size.	Thick-ness.	Size.	Thick-ness.			
<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	
1 Top 9, bottom 4, water line 9.	10	7½	10	11½	1½	.....	Amphitrite..... 1
2 Top 7, bottom 4, water line 7.	10	11½	.....	.....	1½	.....	Miantonomoh... 2
3 Top 9, bottom 5, water line 9.	10	7½	10	11½	1½	.....	Monadnock... 3
4 Top 13, bottom 5, water line 13.	12	8	12	13	2½	.....	Monterey..... 4
5 Top 14, bottom 6, water line 14.	10	7½	10	11½			
5 Top 14, bottom 6, water line 14.	12	8	12	14	2	.....	Puritan..... 5
6 Top 7, bottom 4, water line 7.	10	11½	.....	.....	1½	.....	Terror..... 6

• In reserve.

4 Includes all other auxiliaries.

ARMORED VESSELS—DOUBLE

Name.	Rig and number of funnels.	Type of boilers and engines.	Comple- ment. ^a		Net tonnage for Suez Canal.	Contract price of hull and machinery.	Date of act authorizing the building.	
			Off- cers.	Men.				
1 Amphitrite....	{One military mast. One funnel.....	{Babcock & Wilcox; inclined compound; twin screw.	19	115	.....	(b)	{Aug. 3, 1886 Mar. 3, 1887	}1
2 Miantonomoh....	{One military mast. One funnel.....	{Scotch; inclined compound; twin screw.							19	164	.....	(b)	{Aug. 3, 1886 Mar. 3, 1887	}2
3 Monadnock....	{One military mast. One funnel.....	{Scotch; horizontal triple expansion; twin screw.	19	210	988	(b)	{Aug. 3, 1886 Mar. 3, 1887	}3
4 Monterey....	{One military mast. One funnel.....	{Babcock & Wilcox; vertical triple expansion; twin screw.							19	212	840	$1,628,950	Mar. 3, 1887	}4
5 Puritan....	{One military mast. One funnel.....	{Scotch; horizontal compound; twin screw.	19	210	.....	(b)	{Aug. 3, 1886 Mar. 3, 1887	}5
6 Terror....	{One military mast. One funnel.....	{Scotch; inclined compound; twin screw.							19	210	.....	(b)	{Aug. 3, 1886 Mar. 3, 1887	}6

^a Furnished by Bureau of Navigation, 1910.

^b Appropriation to complete Amphitrite, Miantonomoh, Monadnock, Puritan, and Terror, \$3,178,046.

TURRET MONITORS—Concluded.

Contract signed.	Keel laid.	Launched.	Contract date of completion.	Date of preliminary acceptance.	Date of first and latest commission.	Name.	
1	1874	June 7, 1883	.....	.....	{Apr. 23, 1895 {June 14, 1910	Amphitrite....	1
2	1874	Dec. 5, 1876	.....	.....	{Oct. 27, 1891 {Apr. 9, 1907	Miantonomoh..	2
3	1875	Sept. 19, 1883	.....	.....	Feb. 20, 1896	Monadnock...	3
4 June 14, 1889	Dec. 20, 1889	Apr. 28, 1891	June 14, 1892	Feb. 6, 1893	{Feb. 13, 1893 {Sept. 28, 1907	Monterey.....	4
5	1875	Dec. 6, 1882	.....	.....	{Dec. 10, 1896 {Aug. 15, 1906	Puritan.....	5
6	1874	Mar. 24, 1883	.....	.....	{Apr. 15, 1896 {May 1, 1905	Terror.....	6

* Subject to possible change.

UNARMORED STEEL VESSELS—

Name and official number.	By whom and where built or building.	Condition or service June 30, 1910.	Ship fully equipped, ready for sea, normal stores, ammunition, and coal.					Displacement (normal).	Tons per inch immersion at normal draft.	
			Length between perpendiculars. ^a	Breadth on load water line.	Mean draft.					
			<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Tons.</i>	<i>Tons.</i>			
1 Albany <i>at</i>	Armstrong, Mitchell & Co., Newcastle on Tyne, England. ^b	Navy-yard, Puget Sound.	346 0	43 9	16 10	3,430	23.00	1		
2 Atlanta.....	John Roach & Sons, Chester, Pa.	Barrack ship, navy-yard, Charleston.	277 5	42 2	16 10	3,000	20.00	2		
3 Baltimore (3)...	Wm. Cramp & Sons, Philadelphia, Pa.	Navy-yard, Philadelphia./	327 6	48 7½	19 6	4,413	25.85	3		
4 Boston ^h	John Roach & Sons, Chester, Pa.	Navy-yard, Puget Sound./	277 5	42 2	16 10	3,000	20.00	4		
5 Charleston (22)...	Newport News S. B. Co., Newport News, Va.	Asiatic Fleet....	424 0	66 0	22 6	4,970	44.85	5		
6 Chattanooga (16) <i>sg.</i>	Crescent Ship Yard, Elizabethport, N. J.	En route navy-yard, Puget Sound.	292 0	44 0	15 9	3,200	22.30	6		
7 Chicago ^k	John Roach & Sons, Chester, Pa.	Naval militia, Massachusetts.	325 0	48 2½	19 0	4,500	27.00	7		
8 Cincinnati (7)...	Navy-yard, New York.	Navy-yard, Mare Island./	300 0	42 0	18 0	3,183	20.00	8		
9 Cleveland (10) <i>sg.</i>	Bath Iron Works, Bath, Me.	En route navy-yard, Mare Island./	292 0	44 0	15 9	3,200	22.30	9		
10 Columbia (12)...	Wm. Cramp & Sons, Philadelphia, Pa.	Navy-yard, Philadelphia./	411 7	58 2	22 6	7,350	36.87	10		
11 Denver (14) <i>sg.</i> ...	Neafie & Levy, Philadelphia, Pa.	Navy-yard, Mare Island./	292 0	44 0	15 9	3,200	22.30	11		
12 Des Moines (15) <i>sg.</i>	Fore River Engine Co., Quincy, Mass.	Special service..	292 0	44 0	15 9	3,200	22.30	12		
13 Galveston (17) <i>sg.</i>	Wm. R. Trigg Co., Richmond, Va.	Navy-yard, Puget Sound./	292 0	44 0	15 9	3,200	22.30	13		
14 Milwaukee (21)...	Union Iron Works, San Francisco, Cal.	Navy-yard, Puget Sound./	424 0	66 0	22 6	4,970	44.85	14		
15 Minneapolis (13) ^k	Wm. Cramp & Sons, Philadelphia, Pa.	Navy-yard, Philadelphia./	411 7	58 2	22 6	7,350	36.87	15		
16 Newark (1) ^k	Wm. Cramp & Sons, Philadelphia, Pa.	Station ship, Guantanamo Bay.	311 5	49 2	18 9	4,083	25.00	16		
17 New Orleans <i>at</i> ...	Armstrong, Mitchell & Co., Newcastle on Tyne, England. ^b	Asiatic Fleet....	346 0	43 9	16 10	3,430	23.00	17		
18 Olympia (6) ^k	Union Iron Works, San Francisco, Cal.	Naval Academy. ^a	340 0	53 0½	21 6	5,865	29.35	18		
19 Raleigh (8).....	Navy-yard, Norfolk, Va.	Navy-yard, Mare Island./	300 0	42 0	18 0	3,183	20.00	19		
20 St. Louis (20)...	Neafie & Levy, Philadelphia, Pa.	Navy-yard, Puget Sound./	424 0	66 0	22 6	4,970	44.85	20		
21 San Francisco (5) ^o	Union Iron Works, San Francisco, Cal.	Navy-yard, Norfolk./	310 0	49 2	18 9	4,083	25.00	21		
22 Tacoma (18) <i>at</i> ...	Union Iron Works, San Francisco, Cal.	Special service..	292 0	44 0	15 9	3,200	22.30	22		
Total normal displacement.....							105,170			

- ^a Length on designed L. W. L.
^b Engines and boilers built by R. and W. Hawthorn, Leslie & Co. (Limited), St. Peter's Works, Newcastle on Tyne, England.
^c One-half full supply of ammunition and stores.
^d Calculated to bottom of beams for steaming competition trials.
^e Includes all other auxiliaries.
^f Out of commission.
^g Full supply of ammunition and stores.
^h Stricken from the navy list, July 12, 1910.

PROTECTED CRUISERS.

	Length over all.		Full load displacement.	Speed on trial.	I. H. P. of propelling machinery and its auxiliaries on trial.	Displacement on trial.	Bunker capacity to 6 inches below beams (43 cubic feet to the ton).	Name and official number.	
	Ft. in.	Tons.							
1	354 4	3,954	20.50	7,400	3,450	821	Albany.....	1	
2	288 6	.....	15.60	3,500	3,070	575	Atlanta.....	2
3	335 0	5,482	20.10	8,777	4,563	1,075	Baltimore (3).....	3	
4	288 3	.....	15.60	4,300	3,025	428	Boston.....	4
5	426 6	10,839	22.04	27,200	9,681	1,700	Charleston (22).....	5	
6	308 11	3,514	16.65	5,303	3,207	675	Chattanooga (16).....	6	
7	342 2	.....	18.00	9,000	4,546	850	Chicago.....	7
8	305 9	3,339	19.00	8,290	.....	575	Cincinnati (7).....	8
9	308 10	3,514	16.45	4,640	3,202	675	Cleveland (19).....	9	
10	413 1	8,270	22.80	18,269	7,387	1,525	Columbia (12).....	10	
11	308 9	3,514	16.75	6,135	3,200	675	Denver (14).....	11	
12	309 10	3,514	16.65	5,340	3,196	700	Des Moines (15).....	12	
13	308 10	3,514	16.41	5,073	3,255	700	Galveston (17).....	13	
14	426 6	10,839	22.22	24,166	9,700	1,650	Milwaukee (21).....	14	
15	413 1	8,270	23.07	20,544	7,387	1,400	Minneapolis (13).....	15	
16	327 7	4,533	19.00	8,727	3,970	800	Newark (1).....	16	
17	354 5	3,954	20.00	7,500	.....	750	New Orleans.....	17
18	344 1	6,558	21.69	17,080	5,566	1,000	Olympia (6).....	18	
19	305 10	3,339	19.00	8,500	.....	575	Raleigh (8).....	19
20	426 6	10,839	22.13	27,264	9,665	1,650	St. Louis (20).....	20	
21	324 6	4,583	19.52	9,761	4,067	625	San Francisco (5).....	21	
22	308 6	3,514	16.58	5,288	3,211	675	Tacoma (18).....	22	

† Two-thirds full supply of ammunition and stores.

‡ Fitted as a flagship.

§ Estimated.

■ Engines and boilers built by Humphreys & Tennant (Limited), London.

□ In reserve.

○ Fitted as a mine laying vessel.

(*sp*) Sheathed with Georgia pine below water line.

(*st*) Sheathed with teak below water line.

UNARMORED STEEL VESSELS—

	Name and official number.	Batteries.			
		Main.	Secondary.	Torpedo tubes.	
1	Albany	10 5" R. F.	10 3-pdr. S. A., 2 1-pdr. R. F., 1 3" F., 2.30 cal. A. ....	.....	1
2	Atlanta	{ 2 8" B. L. R.	{ 6 6-pdr. R. F., 4 1-pdr. R. F., 2.30 cal. A., 1 3" F.	}	2
3	Baltimore (3)	{ 6 6" R. F.			
		12 6" R. F.	6 3" R. F., 6 3-pdr. R. F., 4 1-pdr. R. F., 1 3" F., 4.30 cal. A.		3
4	Boston	{ 2 8" B. L. R.	{ 6 6-pdr. R. F., 2 1-pdr. R. F.; 2 1-pdr. A., 1 3" F., 2.30 cal. A.	}	4
5	Charleston (22) a ..	{ 6 6" R. F.			
		14 6" R. F.	18 3" R. F., 4 3-pdr. S. A., 2 1-pdr. R. F., 2 3" F., 4.30 cal. A., 2.30 cal. M.		5
6	Chattanooga (16) ..	10 5" R. F.	8 6-pdr. S. A., 2 1-pdr. R. F., 1 3" F., 4.30 cal. A.		6
7	Chicago	{ 4 8" B. L. R.	{ 9 6-pdr. R. F., 2 1-pdr. R. F., 1 3" F., 2.30 cal. A.	}	7
8	Cincinnati (7)	{ 14 5" R. F.			
		11 5" R. F.	8 6-pdr. R. F., 2 1-pdr. R. F., 1 3" F., 2.30 cal. A.		8
9	Cleveland (19)	10 5" R. F.	8 6-pdr. S. A., 2 1-pdr. R. F., 1 3" F., 4.30 cal. A.		9
10	Columbia (12)	{ 1 8" B. L. R.	{ 12 6-pdr. R. F., 2 1-pdr. R. F., 2 1-pdr. A., 1 3" F., 2.30 cal. A.	}	10
		{ 2 6" R. F.			
		8 4" R. F.			
11	Denver (14)	10 5" R. F.	8 6-pdr. S. A., 2 1-pdr. R. F., 1 3" F., 4.30 cal. A.		11
12	Des Moines (15)	10 5" R. F.	8 6-pdr. S. A., 2 1-pdr. R. F., 1 3" F., 4.30 cal. A.		12
13	Galveston (17)	10 5" R. F.	8 6-pdr. S. A., 2 1-pdr. R. F., 1 3" F., 4.30 cal. A.		13
14	Milwaukee (21) a ..	14 6" R. F.	18 3" R. F., 4 3-pdr. S. A., 2 1-pdr. R. F., 2 3" F., 4.30 cal. A., 2.30 cal. M.		14
15	Minneapolis (13) ..	{ 1 8" B. L. R.	{ 12 6-pdr. R. F., 2 1-pdr. R. F., 1 3" F., 2.30 cal. A.	}	15
		{ 2 6" R. F.			
		8 4" R. F.			
16	Newark (1)	12 6" R. F.	6 3" R. F., 6 3-pdr. S. A., 4 1-pdr. R. F., 1 3" F., 4.30 cal. A.		16
17	New Orleans	10 5" R. F.	10 3-pdr. S. A., 2 1-pdr. R. F., 2.30 cal. A., 1 3" F.		17
18	Olympia (6)	{ 2 7" B. L. R.	{ 14 6-pdr. R. F., 4 1-pdr. R. F., 1.30 cal. A., 1.30 cal. M.	}	18
19	Raleigh (8)	{ 10 5" R. F.			
		11 5" R. F.	8 6-pdr. R. F., 2 1-pdr. R. F., 1 3" F., 2.30 cal. A.		19
20	St. Louis (20) a ..	14 6" R. F.	18 3" R. F., 4 3-pdr. S. A., 2 1-pdr. R. F., 2 3" F., 4.30 cal. A., 2.30 cal. M.		20
21	San Francisco (5) ..	8 5" R. F.	10 6-pdr. R. F., 4 1-pdr. R. F., 2.30 cal. A.		21
22	Tacoma (18)	10 5" R. F.	8 6-pdr. S. A., 2 1-pdr. R. F., 1 3" F., 4.30 cal. A.		22

a Thickness of belt armor 4 inches.

PROTECTED CRUISERS—Continued.

Protective deck amidships; total thickness.		Type of engines and boilers.	Name and official number.
Flat.	Slope.		
<i>Inches.</i>	<i>Inches.</i>		
1	1½	3½	Twin screw vertical triple expansion. Cylindrical..... Albany..... 1
2	1½	1½	(Single screw horizontal compound. Scotch; Babcock & Wilcox. } Atlanta..... 2
3	1½	4	Twin screw horizontal triple expansion. Babcock & Wilcox. } Baltimore (3).... 3
4	1½	1½	Single screw horizontal compound. Scotch..... Boston..... 4
5	2	3	Twin screw vertical triple expansion. Babcock & Wilcox. } Charleston (22).... 5
6	¾	2½	Twin screw vertical triple expansion. Babcock & Wilcox. } Chattanooga (16).. 6
7	1½	1½	(Twin screw horizontal triple expansion. Scotch; Babcock & Wilcox. } Chicago..... 7
8	1	2½	Twin screw vertical triple expansion. Babcock & Wilcox. } Cincinnati (7).... 8
9	¾	2½	Twin screw vertical triple expansion. Babcock & Wilcox. } Cleveland (19).... 9
10	2½	4	Triple screw vertical triple expansion. Scotch..... Columbia (12).... 10
11	¾	2½	Twin screw vertical triple expansion. Babcock & Wilcox. } Denver (14)..... 11
12	¾	2½	Twin screw vertical triple expansion. Babcock & Wilcox. } Des Moines (15)... 12
13	¾	2½	Twin screw vertical triple expansion. Babcock & Wilcox. } Galveston (17).... 13
14	2	3	Twin screw vertical triple expansion. Babcock & Wilcox. } Milwaukee (21).... 14
15	2½	4	Triple screw vertical triple expansion. Scotch..... Minneapolis (13)... 15
16	2	3	Twin screw horizontal triple expansion. Scotch..... Newark (1)..... 16
17	1½	3½	Twin screw vertical triple expansion. Cylindrical..... New Orleans..... 17
18	2	4½	Twin screw vertical triple expansion. Scotch..... Olympia (6)..... 18
19	1	2½	Twin screw vertical triple expansion. Babcock & Wilcox. } Raleigh (8)..... 19
20	2	3	Twin screw vertical triple expansion. Babcock & Wilcox. } St. Louis (20).... 20
21	2	3	Twin screw horizontal triple expansion. Babcock & Wilcox. } San Francisco (5).. 21
22	¾	2½	Twin screw vertical triple expansion. Babcock & Wilcox. } Tacoma (18)..... 22

UNARMORED STEEL VESSELS—

	Name and official number.	Rig and number of funnels.	Comple- ment. ^a		Net ton- nage for Suez Canal.	Contract price of hull and machinery.	Date of act authorizing the build- ing.	
			Offi- cers.	Men.				
1	Albany.....	Two military masts..... Two funnels.....	18	327	b 1,121			1
2	Atlanta.....	Two-masted schooner..... Two funnels.....	18	285	b 1,295	\$617,000	Mar. 3, 1883	2
3	Baltimore (3).....	Two-masted schooner..... Two funnels.....	18	359	b 1,706	1,325,000	Aug. 3, 1886	3
4	Boston.....	Two-masted schooner..... Two funnels.....	18	251	b 1,280	619,000	Mar. 3, 1883	4
5	Charleston (22).....	Two military masts..... Four funnels.....	20	650		2,740,000	June 7, 1900	5
6	Chattanooga (16).....	Two-masted schooner..... Two funnels.....	18	302		1,039,966	Mar. 3, 1899	6
7	Chicago.....	Two-masted schooner..... Two funnels.....	18	411	b 1,560	880,000	Mar. 3, 1883	7
8	Cincinnati (7).....	One pole mast..... Two funnels.....	18	289	b 934	d 1,100,000	Sept. 7, 1888	8
9	Cleveland (19).....	Two-masted schooner..... Two funnels.....	18	279		1,041,650	Mar. 3, 1899	9
10	Columbia (12).....	Two-masted schooner..... Four funnels.....	18	360	2,536	2,725,000	June 30, 1890	10
11	Denver (14).....	Two-masted schooner..... Two funnels.....	18	279	1,566	1,080,000	Mar. 3, 1899	11
12	Des Moines (15).....	Two-masted schooner..... Two funnels.....	18	279		1,065,000	Mar. 3, 1899	12
13	Gulveston (17).....	Two-masted schooner..... Two funnels.....	18	279		1,027,000	Mar. 3, 1899	13
14	Milwaukee (21).....	Two military masts..... Four funnels.....	20	650	b 3,401	2,825,000	June 7, 1900	14
15	Minneapolis (13).....	Two-masted schooner..... Two funnels.....	18	300	2,637	2,090,000	Mar. 2, 1891	15
16	Newark (1).....	Two-masted schooner..... Two funnels.....	18	359	b 1,438	1,248,000	Mar. 3, 1885	16
17	New Orleans.....	Two military masts..... Two funnels.....	18	325	b 1,130			17
18	Olympia (6).....	Two-masted schooner..... Two funnels.....	20	428	b 1,896	1,796,000	Sept. 7, 1888	18
19	Raleigh (8).....	Two funnels..... Two military masts.....	18	280	b 934	b 1,100,000	Sept. 7, 1888	19
20	St. Louis (30).....	Four funnels..... Two military masts.....	20	650		2,740,000	June 7, 1900	20
21	San Francisco (5).....	Two military masts..... Two funnels.....	18	321	b 1,266	1,428,000	Mar. 3, 1887	21
22	Tacoma (18).....	Two-masted schooner..... Two funnels.....	18	279	1,554	1,041,900	Mar. 3, 1899	22

^a Furnished by Bureau of Navigation, 1910.^b Subject to possible change.

PROTECTED CRUISERS—Concluded.

Contract signed.	Keel laid.	Launched.	Contract date of completion.	Date of preliminary acceptance.	Date of first and latest commission.	Name and official number.		
1	.....	Jan. 14, 1899	(c)	.....	May 29, 1900 June 10, 1907	Albany.....	1	
2	July 23, 1883	Nov. 8, 1883	Oct. 9, 1884	Jan. 23, 1885	..... July 19, 1886 May 8, 1905	Atlanta.....	2	
3	Dec. 17, 1886	May 5, 1887	Oct. 6, 1888	June 17, 1888	Dec. 27, 1889 Jan. 7, 1890 May 6, 1903	Baltimore (3) ..	3	
4	July 23, 1883	Nov. 15, 1883	Dec. 4, 1884	Jan. 23, 1885	..... May 2, 1887 Aug. 11, 1902	Boston.....	4	
5	Mar. 30, 1901	Jan. 30, 1902	Jan. 23, 1904	Mar. 30, 1904	Aug. 31, 1905	Oct. 17, 1905	Charleston (22) .	5
6	Dec. 14, 1899	Mar. 29, 1900	Mar. 7, 1903	June 14, 1902	Mar. 3, 1905	Oct. 11, 1904	Chattanooga(16)	6
7	July 26, 1883	Dec. 29, 1883	Dec. 5, 1885	Jan. 26, 1885	..... Apr. 17, 1889 May 14, 1909	Chicago.....	7	
8	.....	Jan. —, 1890	Nov. 10, 1892	.....	..... June 16, 1894 Dec. 2, 1901	Cincinnati (7) ..	8	
9	Dec. 14, 1899	June 1, 1900	Sept. 28, 1901	June 14, 1902	Oct. 29, 1903	Nov. 2, 1903	Cleveland (19) ..	9
10	Nov. 19, 1890	Dec. 30, 1890	July 26, 1892	May 19, 1893	Dec. 22, 1893	{Apr. 23, 1894 Nov. 9, 1903}	Columbia (12) ..	10
11	Dec. 14, 1899	June 28, 1900	June 21, 1902	June 14, 1902	May 5, 1904	May 17, 1904	Denver (14)....	11
12	Dec. 14, 1899	Aug. 28, 1900	Sept. 20, 1902	June 14, 1902	Mar. 5, 1904	Mar. 5, 1904	Des Moines (15)	12
13	Dec. 14, 1899	Jan. 19, 1901	July 23, 1903	June 14, 1902	June 10, 1905	Feb. 15, 1905	Galveston (17) .	13
14	Apr. 17, 1901	July 30, 1902	Sept. 10, 1904	Apr. 17, 1904	Dec. 6, 1906	Dec. 11, 1906	Milwaukee (21) .	14
15	Aug. 31, 1891	Dec. 16, 1891	Aug. 12, 1893	Aug. 31, 1893	Dec. 6, 1894	{Dec. 13, 1894 Oct. 5, 1903}	Minneapolis(13)	15
16	Oct. 27, 1887	June 12, 1888	Mar. 19, 1890	Oct. 27, 1889	Jan. 31, 1891	{Feb. 2, 1891 Mar. 23, 1908}	Newark (1)....	16
17	.....	.....	Dec. 4, 1896	(c)	.....	{Mar. 18, 1898 Nov. 15, 1909}	New Orleans... 17	17
18	July 10, 1890	June 17, 1891	Nov. 5, 1892	Apr. 1, 1893	Feb. 20, 1894	{Feb. 5, 1895 May 14, 1909}	Olympia (6)....	18
19	.....	Dec. —, 1889	Mar. 31, 1892	.....	.....	{Apr. 17, 1894 Jan. 5, 1903}	Raleigh (8)....	19
20	Mar. 11, 1901	July 31, 1902	May 6, 1905	Mar. 11, 1904	Aug. 14, 1906	Aug. 18, 1906	St. Louis (20)...	20
21	Oct. 26, 1887	Aug. 14, 1888	Oct. 26, 1889	Oct. 26, 1889	Oct. 3, 1890	{Nov. 15, 1890 Jan. 2, 1902}	S. Francisco (5)	21
22	Dec. 14, 1899	Sept. 27, 1900	June 2, 1903	June 14, 1902	Jan. 18, 1904	Jan. 30, 1904	Tacoma (18) ...	22

c Date of purchase, Mar. 16, 1898.

d Limit of cost.

UNARMORED STEEL VESSELS—

Name and official number.	By whom and where built or building.	Condition or service June 30, 1910.	Ship fully equipped, ready for sea, full stores and ammunition; normal coal.					
			Length between perpendiculars. ^a	Breadth on load water line.	Mean draft.	Displacement (normal).	Tons per inch immersion at normal draft.	
			<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Tons.</i>	<i>Tons.</i>	
1 Detroit (10) ^b ..	Columbian Iron Works, Baltimore, Md.	Navy-yard, Boston. ^c	257 0	37 0	14 6	2,072	15.75	1
2 Marblehead (11).	City Point Works, Boston, Mass.	Naval Millitia, California.	257 0	37 0	14 6	2,072	15.75	2
3 Montgomery (9). ^d	Columbian Iron Works, Baltimore, Md.	Atlantic Fleet...	257 0	37 0	14 6	2,072	15.75	3
Total normal displacement.....						6,216		

Name and official number.	Batteries.			
	Main.	Secondary.	Torpedo tubes.	
1 Detroit (10)...	10 5" R. F.....	6 6-pdr. R. F., 2 1-pdr. R. F., 1 3" F., 2 30 cal. A.	.....	1
2 Marblehead (11).	10 5" R. F.....	6 6-pdr. R. F., 2 1-pdr. R. F., 1 3" F., 2 30 cal. A.	.....	2
3 Montgomery (9).	.....	4 6-pdr. R. F.	(1 21" submerged..... 1 18" submerged..... 2 18" above water..... 1 14" above water..... 1 35 cm. above water f.	3

Name and official number.	Rig and number of funnels.	Complement. ^g		Net tonnage for Suez Canal.	Contract price of hull and machinery.	Date of act authorizing the building.
		Officers.	Men.			
1 Detroit (10)...	Two-masted schooner.....	} 12	236	A 587	\$612,500	Sept. 7, 1888
2 Marblehead (11).	Two funnels.....					
3 Montgomery (9).	Two-masted schooner.....					
	Two funnels.....	13	239	A 626	674,000	Sept. 7, 1888
	Two-masted schooner.....	} 19	239	A 587	612,500	Sept. 7, 1888
	Two funnels.....					

^a Length on designed L. W. L.^b Stricken from the Navy List July 12, 1910.^c Out of commission.^d Fitted as a torpedo practice ship.

UNPROTECTED CRUISERS.

	Length over all.	Full-load displacement.	Speed on trial.	I. H. P. of propelling machinery and its auxiliaries on trial.	Displacement on trial.	Bunker capacity to 6 inches below beams (43 cubic feet to the ton).	Name and official number.	
	<i>Ft. in.</i>	<i>Tons.</i>	<i>Knots.</i>		<i>Tons.</i>	<i>Tons.</i>		
1	269 6	2,212	18.71	5,207	2,065	368	Detroit (10).....	1
2	269 6	2,212	18.44	4,937	2,054	346	Marblehead (11).....	2
3	269 6	2,212	19.06	5,543	2,080	265	Montgomery (9).....	3

	Water-tight deck.		Type of engines and boilers.	Name and official number.
	Flat.	Slope.		
	<i>Inch.</i>	<i>Inch.</i>		
1	$\frac{1}{4}$	$\frac{1}{4}$	Twin screw vertical triple expansion. Scotch.....	Detroit (10)....
2	$\frac{1}{4}$	$\frac{1}{4}$	Twin screw vertical triple expansion. Scotch.....	Marblehead (11).
3	$\frac{1}{4}$	$\frac{1}{4}$	Twin screw vertical triple expansion. Scotch.....	Montgomery (9).

	Contract signed.	Keel laid.	Launched.	Contract date of completion.	Date of preliminary acceptance.	Date of first and latest commission.	Name and official number.
1	Nov. 2, 1889	Feb., 1890	Oct. 28, 1891	May 2, 1892	July 18, 1893	July 20, 1893 Sept. 23, 1902	Detroit (10)....
2	Nov. 11, 1889	Oct., 1890	Aug. 11, 1892	May 11, 1892	Jan. 8, 1894	Apr. 2, 1894 Nov. 10, 1902	Marblehead (11).
3	Nov. 2, 1889	Feb., 1890	Dec. 5, 1891	May 2, 1892	Mar. 5, 1894	June 21, 1894 Jan. 2, 1906	Montgomery (9).

^e Howell.
^f Schwartzkoff.

^g Furnished by Bureau of Navigation, 1910.
^h Subject to possible change.

UNARMORED STEEL VESSELS—

Name and official number.	By whom and where built or building.	Condition or service June 30, 1910.	Ship fully equipped, ready for sea, normal stores, ammunition, and coal.					
			Length between perpendiculars. ^a	Breadth on load water line.	Mean draft.	Displacement (normal).	Tons per inch immersion at normal draft.	
1 Birmingham (2). ^b	Fore River Shipbuilding Co., Quincy, Mass.	Special service..	<i>Ft. in.</i> 420 0	<i>Ft. in.</i> 47 1	<i>Ft. in.</i> 16 9	<i>Tons.</i> 3,750	<i>Tons.</i> 31.00	1
2 Chester (1). ^b	Bath Iron Works, Bath, Me.	Atlantic Fleet...	420 0	47 1	16 9	3,750	31.00	2
3 Salem (3). ^b	Fore River Shipbuilding Co., Quincy, Mass.	Special service..	420 0	47 1	16 9	3,750	31.00	3
Total normal displacement.....						11,250		

Name and official number.	Batteries.			
	Main.	Secondary.	Torpedo tubes.	
1 Birmingham (2).....	{ 2 5" R. F..... 6 3" R. F.....	2 3-pdr. R. F.....	2 21" submerged.....	1
2 Chester (1).....	{ 2 5" R. F..... 6 3" R. F.....	2 3-pdr. R. F.....	2 21" submerged.....	2
3 Salem (3).....	{ 2 5" R. F..... 6 3" R. F.....	2 3-pdr. R. F.....	2 21" submerged.....	3

Name and official number.	Rig and number of funnels.	Complement. ^f		Net tonnage for Suez Canal.	Contract price of hull and machinery.	Date of act authorizing the building.	
		Officers.	Men.				
1 Birmingham (2).....	{ Four funnels..... Two masts.....	22	355	.....	\$1,556,000	Apr. 27, 1904	1
2 Chester (1).....	{ Four funnels..... Two masts.....	22	351	.....	1,688,000	Apr. 27, 1904	2
3 Salem (3).....	{ Four funnels..... Two masts.....	22	351	.....	1,556,000	Apr. 27, 1904	3

^a Length on designed L. W. L.

^b 2" N. S. water-line protection.

^f 40 tons Supplies and Accounts, two-thirds full supply other stores and ammunition.

SCOUT CRUISERS.

	Length over all.	Full-load displacement.	Speed on trial.	I. H. P. of propelling machinery and its auxiliaries on trial.	Displacement on trial.	Bunker capacity to 6 inches below beams (43 cubic feet to the ton).	Name and official number.	
1	<i>Ft. in.</i> 423 1	<i>Tons.</i> 4,687	<i>Knots.</i> 24.33	15,670	<i>Tons.</i> 3,720	<i>Tons.</i> 1,400	Birmingham (2).....	1
2	423 1	4,687	26.52	16,000	3,673	1,375	Chester (1).....	2
3	423 1	4,687	25.95	17,409	3,751	1,400	Salem (3).....	3

	Water-tight deck.		Type of engines and boilers.	Name and official number.
	Flat.	Slope.		
	<i>Inches.</i>	<i>Inches.</i>		
1	Twin screw vertical triple expansion. Fore River.....	Birmingham (2)... 1
2	Four screw turbines, Parsons type. Normand.....	Chester (1)..... 2
3	Twin screw turbines, Curtis type. Fore River.....	Salem (3)..... 3

	Contract signed.	Keel laid.	Launched.	Contract date of completion.	Date of preliminary acceptance.	Date of first and latest commission.	Name and official number.	
1	May 17, 1905	Aug. 14, 1905	May 29, 1907	Nov. 17, 1907	Apr. 10, 1908	Apr. 11, 1908	Birmingham (2).	1
2	May 4, 1905	Sept. 25, 1905	June 26, 1907	May 4, 1908	Apr. 24, 1908	Apr. 25, 1908	Chester (1).....	2
3	May 17, 1905	Aug. 28, 1905	July 27, 1907	Mar. 17, 1908	July 27, 1908	Aug. 1, 1908	Salem (3).....	3

‡ Estimated.
* Shaft horsepower.

/ Furnished by Bureau of Navigation, 1910.

UNARMORED STEEL

	Name and official number.	By whom and where built or building.	Condition or service June 30, 1910.	Ship fully equipped, ready for sea, normal stores, ammunition, and coal.					
				Length between perpendiculars. ^a	Breadth on load water line.	Mean draft.	Displacement (normal).	Tons per inch immersion at normal draft.	
				<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Tons.</i>	<i>Tons.</i>	
1	Bennington (4) ^b	N. F. Palmer, jr., & Co., Chester, Pa.	Navy-yard, Mare Island. ^c	230 0	36 0	14 0	41,710	13.79	1
2	Castine (6).....	Bath Iron Works, Bath, Me.	Tender, submarine division, Atlantic Torpedo Fleet.	204 0	32 1½	12 0	41,177	10.78	2
3	Concord (3) ^e ...	N. F. Palmer, jr., & Co., Chester, Pa.	Navy-yard, Puget Sound. ^c	230 0	36 0	14 0	41,710	13.79	3
4	Don Juan de Austria. / ^g	Cartagena, Spain....	Naval Militia, Michigan.	210 0	432 0	12 6	1,130	11.65	4
5	Isla de Cuba / ..	W. G. Armstrong, Newcastle on Tyne, England.	Naval Militia, Maryland.	192 10	30 1½	11 6	1,030	9.73	5
6	Isla de Luzon / .	W. G. Armstrong, Newcastle on Tyne, England.	Naval Militia, Louisiana.	192 10	30 1½	11 6	1,030	9.73	6
7	Machias (5)....	Bath Iron Works, Bath, Me.	Naval Militia, Connecticut.	204 0	32 1½	12 0	41,177	10.78	7
8	Petrel (2).....	Columbian Iron Works, Baltimore, Md.	En route navy-yard, Portsmouth.	181 4	31 0	11 6	890	9.26	8
9	Yorktown (1)..	Wm. Cramp & Sons, Philadelphia, Pa.	Special service....	230 0	36 0	14 0	41,710	13.75	9
10	Gunboat No. 16	.....	Contract not awarded.	.....	.....	.....	.....	.....	10
Total normal displacement (excepting No. 16).....							11,564		

^a Length on designed L. W. L.^b Stricken from the navy list Sept. 10, 1910.^c Out of commission.^d Full supply ammunition and stores, normal coal.

VESSELS—GUNBOATS.

	Length over all.	Full-load displacement.	Speed on trial.	I. H. P. of propelling machinery and its auxiliaries on trial.	Displacement on trial.	Bunker capacity to 6 inches below beams (43 cubic feet to the ton).	Name and official number.	
	<i>Ft. in.</i>	<i>Tons.</i>	<i>Knots.</i>		<i>Tons.</i>	<i>Tons.</i>		
1	244 5	1,910	17.50	3,380	1,708	346	Bennington (4).....	1
2	212 4	1,293	16.03	2,180	1,060	210	Castine (6).....	2
3	244 5	1,910	16.80	3,359	1,725	354	Concord (3).....	3
4	215 6	.....	12.20	941	1,015	204	Don Juan de Austria.....	4
5	196 9	.....	13.08	844	950	159	Isla de Cuba.....	5
6	196 9	.....	11.23	516	1,020	159	Isla de Luzon.....	6
7	212 4	1,293	15.46	1,848	1,067	261	Machias (5).....	7
8	188 0	.....	11.40	1,008	867	193	Petrel (2).....	8
9	244 5	1,910	16.14	3,341	1,720	341	Yorktown (1).....	9
10	.....	.....	.....	.....	.....	.....	Gunboat No. 16.....	10

* Stricken from the navy list July 12, 1910.
 † Captured during war with Spain.

‡ Iron.
 § Molded.

UNARMORED STEEL VESSELS—

Name and official number.	Batteries.			Torpedo tubes.
	Main.	Secondary.		
1 Bennington (4)....	6 6" R. F.....	4 6-pdr. R. F., 4 1-pdr. R. F., 2 .30 cal. M.....		1
2 Castine (6).....		2 6-pdr. R. F.....		1 18" above water. 2
3 Concord (3).....	6 6" R. F.....	4 3-pdr. S. A., 2 1-pdr. R. F., 2 .30 cal. A.....		3
4 Don Juan de Austria.	6 3" R. F.....	4 6-pdr. R. F., 2 1-pdr. R. F., 2 .30 cal. A.....		4
5 Isla de Cuba.....	6 3" R. F.....	4 6-pdr. R. F., 4 .30 cal. A.....		5
6 Isla de Luzon.....	4 4" R. F.....	4 6-pdr. R. F., 4 .30 cal. A.....		6
7 Machias (5).....	8 4" R. F.....	4 6-pdr. R. F., 2 1-pdr. R. F., 2 .30 cal. A.....		7
8 Petrel (2).....	4 6" R. F.....	2 3-pdr. R. F., 2 1-pdr. R. F., 2 .30 cal. A.....		8
9 Yorktown (1).....	6 6" R. F.....	4 3-pdr. R. F., 4 1-pdr. R. F., 2 .30 cal. A.....		9
10 Gunboat No. 16.....				10

Name and official number.	Rig and number of funnels.	Complement. ^b		Net tonnage for Suez Canal.	Contract price of hull and machinery.	Date of act authorizing the building.	
		Offic-ers.	Men.				
1 Bennington (4).....	Two-masted schooner... One funnel.....	10	175	c 481	\$400,000	Mar. 3, 1887	1
2 Castine (6).....	Two-masted schooner... One funnel.....							10	138	c 398	318,500	Mar. 2, 1889	2
3 Concord (3).....	Two-masted schooner... One funnel.....	10	177	c 481	490,000	Mar. 3, 1887	3
4 Don Juan de Austria	Two-masted schooner... One funnel.....							8	145	c 366	d 180,000	4
5 Isla de Cuba.....	Two-masted schooner... Two funnels.....	8	145	c 314	d 215,000		5
6 Isla de Luzon.....	Two-masted schooner... Two funnels.....							8	143	c 314	d 215,000	6
7 Machias (5).....	Two-masted schooner... One funnel.....	10	144	c 398	318,500	Mar. 2, 1889	7
8 Petrel (2).....	Three-masted schooner... One funnel.....							8	130	362	247,000	Mar. 3, 1885	8
9 Yorktown (1).....	Two-masted schooner... One funnel.....	10	177	c 482	455,000	Mar. 3, 1885	9
10 Gunboat No. 16.....	One funnel.....						

^a Protective deck.

^b Furnished by Bureau of Navigation, 1910.

GUNBOATS—Concluded.

Water-tight deck.		Type of engines and boilers.	Name and official number.
Flat.	Slope.		
Inches.	Inches.		
1	↓	Twin screw horizontal triple expansion. Cylindrical.	Bennington (4)..... 1
2	↖	Twin screw vertical triple expansion. Gunboat.	Castine (6)..... 2
3	↓	Twin screw horizontal triple expansion. Cylindrical.	Concord (3)..... 3
4	↓	Single screw horizontal compound. Gunboat...	Don Juan de Austria..... 4
5	◦ 1½	Twin screw horizontal triple expansion. Cylindrical.	Isla de Cuba..... 5
6	◦ 1½	Twin screw horizontal triple expansion. Cylindrical.	Isla de Luzon..... 6
7	↖	Twin screw vertical triple expansion. Gunboat.	Machias (5)..... 7
8	↓	Single screw horizontal compound. Cylindrical.	Petrel (2)..... 8
9	↓	Twin screw horizontal triple expansion. Cylindrical.	Yorktown (1)..... 9
10	↓	.....	Gunboat No. 16..... 10

	Contract signed.	Keel laid.	Launched.	Contract date of completion.	Date of preliminary acceptance.	Date of first and latest commission.	Name and official number.
1	Nov. 15, 1887	June, 1888	June 3, 1890	May 15, 1889	May 7, 1891	June 20, 1891 Mar. 2, 1903	Bennington (4)..... 1
2	Apr. 12, 1890	Feb., 1891	May 11, 1892	Apr. 12, 1892	Aug. 18, 1893	Oct. 22, 1894 Oct. 4, 1908	Castine (6)..... 2
3	Nov. 15, 1887	May, 1888	Mar. 8, 1890	May 15, 1889	Feb. 6, 1891	Feb. 14, 1891 Sept. 16, 1905	Concord (3)..... 3
4	.....	.....	1887	.....	.....	Apr. 11, 1900 Dec. 11, 1905	Don Juan de Austria..... 4
5	.....	.....	1886	Dec., 1886	.....	Apr. 11, 1900	Isla de Cuba... 5
6	.....	.....	1887	Dec., 1886	.....	Jan. 31, 1900	Isla de Luzon.. 6
7	Apr. 12, 1890	Feb., 1891	Dec. 8, 1891	Apr. 12, 1892	June 23, 1893	July 20, 1893 July 24, 1901	Machias (5).... 7
8	Dec. 22, 1886	Aug. 27, 1887	Oct. 13, 1888	Dec. 22, 1887	Oct. 15, 1889	Dec. 10, 1889 May 2, 1910	Petrel (2)..... 8
9	Jan. 31, 1887	May 14, 1887	Apr. 28, 1888	Jan. 31, 1888	Mar. 23, 1889	Apr. 23, 1889 Oct. 1, 1906	Yorktown (1).. 9
10	.....	.....	.....	.....	.....	.....	Gunboat No. 16 10

* Subject to possible change.

* Estimated value.

* Limit of cost.

UNARMORED STEEL VESSELS—

Name and official number.	By whom and where built or building.	Condition or service, June 30, 1910.	Ship, fully equipped ready for sea, full stores and ammunition, normal coal.					
			Length between perpendiculars. ^a	Breadth on load water line.	Mean draft.	Displacement (normal).	Tons per inch immersion at normal draft.	
1 Helena (9) ^b ...	Newport News S. B. Co., Newport News, Va.	Asiatic Fleet....	<i>Fl. in.</i> 250 9	<i>Fl. in.</i> c39 8	<i>Fl. in.</i> 9 0	Tons. 1,392	Tons. 17.10	1
2 Nashville (7)...	Newport News S. B. Co., Newport News, Va.	Naval Militia, Illinois.	220 0	38 1½	11 0	1,371	13.16	2
3 Wilmington (8) ^b	Newport News S. B. Co., Newport News, Va.	Asiatic Fleet....	250 9	c39 8	9 0	1,392	17.10	3
Total normal displacement.....						4,155		

Name and official number.	Batteries.		
	Main.	Secondary.	Torpedo tubes.
1 Helena (9).....	8 4" R. F.....	4 6-pdr. R. F., 4 1-pdr. R. F., 2 6mm A.....	
2 Nashville (7).....	8 4" R. F.....	4 6-pdr. R. F., 2 1-pdr. R. F., 2 .30 cal. A.....	
3 Wilmington (8).....	8 4" R. F.....	4 6-pdr. R. F., 4 1-pdr. R. F., 4 6mm A.....	

Name and official number.	Rig and number of funnels.	Complement. ^d		Net tonnage for Suez Canal.	Contract price of hull and machinery.	Date of act authorizing the building.	
		Officers.	Men.				
1 Helena (9).....	(One military mast.....) (One funnel.....)	10	177	¢ 921	\$280,000	Mar. 3, 1893	1
2 Nashville (7).....	(Two-masted schooner.....) (Two funnels.....)	11	175	¢ 756	280,000	Mar. 3, 1893	2
3 Wilmington (8).....	(One military mast.....) (One funnel.....)	10	175	¢ 921	280,000	Mar. 3, 1893	3

^a Length on designed L. W. L.^b One-inch plate on side.^c Extreme breadth, 40' 1½".

LIGHT-DRAFT GUNBOATS.

	Length over all.	Full-load displacement.	Speed on trial.	I. H. P. of propelling machinery and its auxiliaries on trial.	Displacement on trial.	Bunker capacity to 6 inches below beams (43 cu. ft. to the ton).	Name and official number.	
	<i>Ft. in.</i>	<i>Tons.</i>	<i>Knots.</i>		<i>Tons.</i>	<i>Tons.</i>		
1	251 10	1,571	15.50	1,969	1,340	300	Helena (9).....	1
2	233 8	1,620	16.30	2,524	1,379	363	Nashville (7).....	2
3	251 10	1,571	15.08	1,868	1,330	300	Wilmington (8).....	3

	Water-tight deck.		Type of engines and boilers.	Name and official number.
	Flat.	Slope.		
	<i>Inches.</i>	<i>Inches.</i>		
1			Twin screw vertical triple expansion. Hohenstein.....	Helena (9).....
2			Twin screw vertical quadruple expansion. Mosher.....	Nashville (7).....
3			Twin screw vertical triple expansion. Hohenstein.....	Wilmington (8).....

	Contract signed.	Keel laid.	Launched.	Contract date of completion.	Date of preliminary acceptance.	Date of first and latest commission.	Name and official number.	
1	Jan. 29, 1894	Oct. 11, 1894	Jan. 30, 1896	Jan. 29, 1896	May 24, 1897	{ July 8, 1897 July 16, 1906 }	Helena (9).....	1
2	Jan. 22, 1894	Aug. 9, 1894	Oct. 19, 1895	Jan. 22, 1896	June 25, 1897	{ Aug. 19, 1897 Aug. 8, 1905 }	Nashville (7).....	2
3	Jan. 29, 1894	Oct. 8, 1894	Oct. 19, 1895	Jan. 29, 1896	May 17, 1897	{ May 13, 1897 Apr. 2, 1906 }	Wilmington (8) ..	3

*Furnished by Bureau of Navigation, 1910.

*Subject to possible change.

UNARMORED COMPOSITE

Name and official number.	By whom and where built or building.	Condition or service June 30, 1910.	Ship fully equipped ready for sea, normal stores, ammunition, and coal.					
			Length between perpendiculars. ^a	Breadth on load water line.	Mean draft.	Displacement (normal).	Tons per inch immersion at normal draft.	
			<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Tons.</i>	<i>Tons.</i>	
1 Annapolis (10)	Lewis Nixon, Elizabethport, N. J.	Station ship, Tutuila, Samoa.	168 0	36 0	12 0	1,010	10.72	1
2 Dubuque (17)	Gas Engine and Power Co. and Chas. L. Seabury & Co. (Consolidated), Morris Heights, N. Y.	Special service....	174 0	35 0	12 3	1,085	10.66	2
3 Marietta (15)	Union Iron Works, San Francisco, Cal.	Special service....	174 0	34 0	12 0	990	10.10	3
4 Newport (12)	Bath Iron Works, Bath, Me.	Public Marine School, New York.	168 0	36 0	12 0	1,010	10.72	4
5 Paducah (18)	Gas Engine and Power Co. and Chas. L. Seabury & Co. (Consolidated), Morris Heights, N. Y.	Special service....	174 0	35 0	12 3	1,085	10.66	5
6 Princeton (13)	J. H. Dialogue & Son, Camden, N. J.	Special service....	168 0	36 0	12 0	1,010	10.72	6
7 Vicksburg (11)	Bath Iron Works, Bath, Me.	Special service....	168 0	36 0	12 0	1,010	10.72	7
8 Wheeling (14)	Union Iron Works, San Francisco, Cal.	En route navy-yard, Portsmouth.	174 0	34 0	12 0	990	10.10	8
Total normal displacement.....						8,190		

TRAINING SHIP—NAVAL

1 Severn ^c	Bath Iron Works, Bath, Me.	Tender, submarine division, Atlantic Torpedo Fleet.	175 0	37 0	16 6	1,175	10.86	1
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TRAINING SHIPS—

1 Cumberland ..	Navy-yard, Boston.....	Training station, Newport.	176 5	45 8	16 5	1,800	14.16	1
2 Intrepid.....	Navy-yard, Mare Island.	Training station, Yerba Buena.	176 5	45 8	16 5	1,800	14.16	2
Total normal displacement.....						3,600		

TRAINING BRIGANTINE—

1 Boxer.....	Navy-yard, Portsmouth, N. H.	Training station, Newport.	108 0	29 9	9 2	346	5.47	1
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^a Length on designed L. W. L.^b Full supply ammunition and stores, normal coal.^c Two-thirds full supply of ammunition and stores.^d Calculated to bottom of beams for steaming competition trials.

VESSELS—GUNBOATS.

	Length over all.	Full-load displacement.	Speed on trial.	I. H. P. of propelling machinery and its auxiliaries on trial.	Displacement on trial.	Bunker capacity to 6 inches below beams (43 cu. ft. to the ton).	Name and official number.	
	<i>Ft. in.</i>	<i>Tons.</i>	<i>Knots.</i>		<i>Tons.</i>	<i>Tons.</i>		
1	203 6	1,153	13.17	1,223	951	230	Annapolis (10).....	1
2	200 5	1,237	12.90	1,193	1,084	246	Dubuque (17).....	2
3	189 7	1,106	13.02	1,036	990	229	Marietta (15).....	3
4	204 5	1,153	12.29	998	990	224	Newport (12).....	4
5	200 5	1,237	12.85	1,247	1,084	246	Paducah (18).....	5
6	204 5	1,153	10.64	835	1,038	226	Princeton (13).....	6
7	204 5	1,153	12.71	1,111	990	243	Vicksburg (11).....	7
8	189 7	1,106	12.88	1,063	1,000	250	Wheeling (14).....	8

ACADEMY—SHEATHED.

1	224 3	43	Severn.....	1
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STEEL.

1	211 7	1,910	100	Cumberland.....	1
2	211 7	1,910	100	Intrepid.....	2

WOOD.

1	125 4	Boxer.....	1
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^e Formerly Chesapeake. Name changed June 15, 1905.

^f Full supply ammunition, stores, and coal.

^g Estimated.

^h Full supply of stores.

UNARMORED COMPOSITE

Name and official number.	Batteries.			
	Main.	Secondary.	Torpedo tubes.	
1 Annapolis (10).....		4 6-pdr. R. F., 2 .30 cal. A.....		1
2 Dubuque (17)....	6 4" R. F.....	4 6-pdr. R. F., 2 1-pdr. R. F., 2 .30 cal. A.....		2
3 Marietta (15)....	6 4" R. F.....	4 6-pdr. R. F., 2 1-pdr. R. F., 1 .30 cal. A.....		3
4 Newport (12)....	6 4" R. F.....	4 6-pdr. R. F., 2 1-pdr. R. F., 1 .30 cal. A.....		4
5 Paducah (18)....	6 4" R. F.....	4 6-pdr. R. F., 2 1-pdr. R. F., 2 .30 cal. A.....		5
6 Princeton (13)....	6 4" R. F.....	4 6-pdr. R. F., 2 1-pdr. R. F., 2 .30 cal. A.....		6
7 Vicksburg (11)....	6 4" R. F.....	4 6-pdr. R. F., 2 1-pdr. R. F., 2 .30 cal. A.....		7
8 Wheeling (14)....	6 4" R. F.....	4 6-pdr. R. F., 2 1-pdr. R. F., 1 .30 cal. A.....		8

TRAINING SHIP—NAVAL

1 Severn.....	6 4" R. F.....	4 6-pdr. R. F., 2 1-pdr. A., 2 6" A.....		1
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TRAINING SHIPS—

1 Cumberland....	6 4" R. F.....	4 6-pdr. R. F., 2 1-pdr. R. F., 2 .30 cal. A.....		1
2 Intrepid.....	6 4" R. F.....	4 6-pdr. R. F., 2 1-pdr. R. F., 2 .30 cal. A.....		2

TRAINING BRIGANTINE—

1 Boxer.....				1
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VESSELS—GUNBOATS—Continued.

Water-tight deck.		Type of engines and boilers.	Name and official number.
Flat.	Slope.		
Inches.	Inches.		
1	Single-screw vertical triple expansion. Babcock & Wilcox.	Annapolis (10)... 1
2	Twin-screw vertical triple expansion. Babcock & Wilcox..	Dubuque (17)... 2
3	Twin-screw vertical triple expansion. Babcock & Wilcox..	Marietta (15)... 3
4	Single-screw vertical triple expansion. Scotch	Newport (12)... 4
5	Twin-screw vertical triple expansion. Babcock & Wilcox..	Paducah (18)... 5
6	Single-screw vertical triple expansion. Scotch.....	Princeton (13)... 6
7	Single-screw vertical triple expansion. Scotch	Vicksburg (11)... 7
8	Twin-screw vertical triple expansion. Scotch	Wheeling (14)... 8

ACADEMY—SHEATHED—Continued.

1	Sail power.....	Severn..... 1
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STEEL—Continued.

1	Sail power.....	Cumberland... 1
2	Sail power.....	Intrepid... 2

WOOD—Continued.

1	Sail power.....	Boxer..... 1
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UNARMORED COMPOSITE

Name and official number.	Rig and number of funnels.	Comple-ment. ^a		Net tonnage for Suez Canal.	Contract price of hull and machinery.	Date of act authorizing the building.	
		Offi-cers.	Men.				
1 Annapolis (10).....	Three-masted schooner..... One funnel.....	8	148	b 500	\$227,700	Mar. 2, 1895	1
2 Dubuque (17).....	Two-masted schooner..... Two funnels.....	8	154	568	295,000	July 1, 1902	2
3 Marietta (15).....	Two-masted schooner..... One funnel.....	8	155	b 532	223,000	Mar. 2, 1895	3
4 Newport (12).....	Barkentine..... One funnel.....	8	135	b 560	229,400	Mar. 2, 1895	4
5 Paducah (18).....	Two-masted schooner..... Two funnels.....	8	154	568	355,000	July 1, 1902	5
6 Princeton (13).....	Barkentine..... One funnel.....	8	148	b 560	230,000	Mar. 2, 1895	6
7 Vicksburg (11).....	Barkentine..... One funnel.....	8	151	b 560	239,400	Mar. 2, 1895	7
8 Wheeling (14).....	Two-masted schooner..... One funnel.....	8	155	518	219,000	Mar. 2, 1895	8

TRAINING SHIP—NAVAL

1 Severn.....	Ship.....		46	b 865	\$112,600	{Mar. 3, 1897 July 19, 1897}	1
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TRAINING SHIPS—

1 Cumberland.....	Bark.....	16	320	1,400	c d \$410,000	Mar. 3, 1903	1
2 Intrepid.....	Bark.....	16	320	c d \$410,000	Mar. 3, 1903	2

TRAINING BRIGANTINE—

1 Boxer.....	Brigantine.....	4	60	c \$50,000	Mar. 3, 1903	1
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^a Furnished by Bureau of Navigation, 1910.^b Subject to possible change.

VESSELS—GUNBOATS—Concluded.

	Contract signed.	Keel laid.	Launched.	Contract date of completion.	Date of preliminary acceptance.	Date of first and latest commission.	Name and official number.	
1	Nov. 20, 1895	Apr., 1896	Dec. 23, 1896	Feb. 20, 1897	May 18, 1897	July 20, 1897 (Mar. 25, 1907)	Annapolis (10)...	1
2	May 29, 1903	Sept. 22, 1903	Aug. 15, 1904	Nov. 29, 1904	May 31, 1905	June 3, 1905	Dubuque (17)....	2
3	Nov. 26, 1895	Apr. 13, 1896	Mar. 18, 1897	Feb. 26, 1897	Aug. 6, 1897	(Sept. 1, 1897 May 14, 1906)	Marietta (15)....	3
4	Nov. 15, 1895	Mar., 1896	Dec. 5, 1896	Feb. 15, 1897	July 8, 1897	(Oct. 5, 1897 May 18, 1903)	Newport (12)....	4
5	July 6, 1903	Sept. 22, 1903	Oct. 11, 1904	Mar. 6, 1905	Aug. 31, 1905	Sept. 2, 1905	Paducah (18)....	5
6	Nov. 20, 1895	May, 1896	June 3, 1897	Feb. 20, 1897	July 25, 1898	(May 27, 1898 Nov. 5, 1905)	Princeton (13)....	6
7	Nov. 15, 1895	Mar., 1896	Dec. 5, 1896	Feb. 15, 1897	July 8, 1897	(Oct. 23, 1897 May 17, 1909)	Vicksburg (11)...	7
8	Nov. 26, 1895	Apr. 11, 1896	Mar. 18, 1897	Feb. 26, 1897	Aug. 6, 1897	(Aug. 10, 1897 May 3, 1910)	Wheeling (14)....	8

ACADEMY—SHEATHED—Concluded.

1	Mar. 16, 1898	Aug. 2, 1898	June 20, 1899	June 16, 1899	July 22, 1899	(Dec. 3, 1899 Feb. 24, 1909)	Severn.....	1
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STEEL—Concluded.

1	Jan. 21, 1904	Aug. 17, 1904	July 20, 1907	Cumberland.....	1
2	Jan. 2, 1904	Oct. 8, 1904	Aug. 16, 1907	Intrepid.....	2

WOOD—Concluded.

1	Jan. 15, 1904	Oct. 11, 1904	May 11, 1905	Boxer.....	1
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* Limit of cost.

* Act of Congress approved June 29, 1906.

UNARMORED STEEL VESSELS—

Name.	By whom and where built or building.	Condition or service June 30, 1910.	Ship fully equipped ready for sea, full stores, ammunition, and coal.					
			Length between perpendiculars. ^a	Breadth on load water line.	Mean draft.	Displacement (normal).	Tons per inch immersion at normal draft.	
1 Dolphin ^b	John Roach & Sons Chester Pa.	Special service.....	<i>Ft. in.</i> 240 0	<i>Ft. in.</i> 32 0	<i>Ft. in.</i> 14 3	<i>Tons.</i> 1,486	<i>Tons.</i> 13.31	1
2 Vesuvius ^c	Pneumatic Dynamite Gun Co., at Wm. Cramp & Sons, Phil- adelphia, Pa.	Torpedo Station, Newport. ^d	252 4	26 6½	10 7	930	10.65	2
Total normal displacement.....						2,416		

Name.	Batteries.			
	Main.	Secondary.	Torpedo tubes.	
1 Dolphin.....	24" R. F.....	5 3-pdr. S. A., 2 .30-cal. A.....	1 18" submerged... 1 21" submerged... 2 18" above water. 1 21" above water.	1
2 Vesuvius.....		2 3-pdr. R. F.....		2

Name.	Rig and number of funnels.	Comple- ment. ^e		Net ton- nage for Suez Canal.	Contract price of hull and machinery	Date of act authorizing the build- ing.	
		Offi- cers.	Men.				
1 Dolphin.....	{Two-masted schooner..... One funnel..... One pole mast.....}	8	144	/ 447	\$315,000	Mar. 3, 1883	1
2 Vesuvius.....	{One funnel..... One pole mast..... One funnel.....}	4	34	.....	350,000	Aug. 3, 1886	2

^a Length on designed L. W. L.
^b Dispatch boat.

^c Torpedo cruiser for use as a torpedo training vessel.
^d In reserve.

SPECIAL CLASS.

	Length over all.	Full-load displacement.	Speed on trial.	I. H. P. of propelling machinery and its auxiliaries on trial.	Displacement on trial.	Bunker capacity to 6 inches below beams (43 cubic feet to the ton).	Name.	
	<i>Ft. in.</i>	<i>Tons.</i>	<i>Knots.</i>		<i>Tons.</i>	<i>Tons.</i>		
1	256 6	.....	15.50	2,263	1,413	265	Dolphin.....	1
2	252 4	.....	21.42	3,795	793	132	Vesuvius.....	2

Water-tight deck.		Type of engines and boilers.	Name.		
Flat.	Slope.				
<i>Inches.</i>	<i>Inches.</i>				
1	Single screw vertical compound. Cylindrical.....	Dolphin.....	1
2	Twin screw vertical triple expansion. Normand.....	Vesuvius.....	2

	Contract signed.	Keel laid.	Launched.	Contract date of completion.	Date of preliminary acceptance.	Date of first and latest commission.	Name.	
1	July 23, 1883	Oct. 11, 1883	Apr. 12, 1884	July 23, 1884	.....	{ Dec. 8, 1885 Mar. 24, 1898	Dolphin.....	1
2	Feb. 11, 1887	Sept., 1887	Apr. 28, 1888	Feb. 11, 1888	{ June 7, 1890 Feb. 14, 1910			Vesuvius.....	2

* Furnished by Bureau of Navigation, 1910.

/ Subject to possible change.

UNARMORED VESSELS—

Name.	By whom and where built or building.	Condition or service June 30, 1910.	Ship fully equipped, ready for sea, full stores, ammunition, and coal.					
			Length on load water line.	Extreme breadth.	Mean draft.	Displacement.	Tons per inch immersion at normal draft.	
			<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Tons.</i>	<i>Tons.</i>	
1 Alvarado ^a	Clydebank Engineering and Shipbuilding Co.	Naval Militia, Louisiana.	110 0	15 6	5 4	100	2.70	1
2 Arayat ^b	Manila Slip Co., Cavite, P. I.	Naval Station, Cavite.	115 3	17 10	6 6	243	3.80	2
3 Callao ^b	Manila Slip Co., Cavite, P. I.	Asiatic Fleet....	115 3	17 10	6 6	243	3.80	3
4 Elcano ^b	Carraca, Spain.....	Naval Station, Olongapo. ^d	157 11	26 0	10 0	620	7.50	4
5 Mindoro ^b	Hongkong and Whampoa Dock Co.	Asiatic Fleet....	99 9	16 6	6 0	170	3.10	5
6 Pampanga ^b	Manila Slip Co., Cavite, P. I.	Loaned to War Department.	115 3	17 10	6 6	243	3.80	6
7 Panay ^a	Navy-yard, Cavite, P. I.	Naval Station, Cavite. ^d	94 10	17 3	7 1	170	3.00	7
8 Paragua ^b	Manila Slip Co., Cavite, P. I.	Asiatic Fleet....	115 3	17 10	6 6	243	3.80	8
9 Quiros ^e	Hongkong and Whampoa Dock Co.	Naval Station, Cavite. ^d	137 9	22 9	7 9	1350	.....	9
10 Samar ^b	Manila Slip Co., Cavite, P. I.	Asiatic Fleet....	115 3	17 10	6 6	243	3.80	10
11 Sandoval ^a	Clydebank Engineering and Shipbuilding Co.	Naval Militia, New York.	110 0	15 6	5 4	100	2.70	11
12 Villalobos ^e	Hongkong and Whampoa Dock Co.	Asiatic Fleet....	148 0	23 0	7 6	1370	15.10	12
Total displacement.....						3,095		

^a Steel.^b Iron.^c Estimated.NOTE.—The *Mariveles* was stricken from the Navy List June 8, 1908.

GUNBOATS UNDER 500 TONS.

	Length over all.		Speed. <i>c</i>	Maximum I. H. P.	Bunker capacity (48 cubic feet to the ton).	Type of engines and boilers.	Name.	
	<i>Ft. in.</i>	<i>Knots.</i>						
1	116 10				16	Single screw vertical compound. Scotch.....	Alvarado.....	1
2	121 0	10	<i>c</i> 250		33	Twin screw vertical compound. Scotch.....	Arayat.....	2
3	121 0	10	<i>c</i> 250		33	Twin screw vertical compound. Scotch.....	Callao.....	3
4	165 6	11	600		94	Twin screw vertical compound. Scotch.....	Elcano.....	4
5	106 0	7	125		30	Twin screw inclined compound. Scotch.....	Mindoro.....	5
6	121 0	10	<i>c</i> 250		33	Twin screw vertical compound. Scotch.....	Pampanga....	6
7	99 9	8	125		20	Twin screw vertical compound. Scotch.....	Panay.....	7
8	121 0	10	<i>c</i> 250		33	Twin screw vertical compound. Scotch.....	Paragua.....	8
9	145 0	11	<i>c</i> 450		78	Single screw vertical triple expansion. Scotch.	Quiros.....	9
10	121 0	10	<i>c</i> 250		33	Twin screw vertical compound. Scotch.....	Samar.....	10
11	116 10				16	Single screw vertical compound. Scotch.....	Sandoval.....	11
12	156 2	11	<i>c</i> 480		65	Single screw vertical triple expansion. Scotch.	Villalobos....	12

d Out of commission. *e* Composite. *f* Designed.

UNARMORED VESSELS—

Name.	Batteries.			Water-tight deck.		Rig and number of funnels.	
	Main.	Secondary.	Torpedo tubes.	Flat.	Slope.		
1 Alvarado.....		2 3-pdr. R. F. 2 1-pdr. S. A. 2 Colts.....				{Two-masted schooner..... {One funnel.....	1
2 Arayat.....		1 6-pdr. R. F. 4 3-pdr. R. F. 2 1-pdr. R. F. 2 .30 cal. A.....				{Signal mast..... {One funnel.....	2
3 Callao.....		1 6-pdr. R. F. 3 3-pdr. R. F. 2 1-pdr. R. F. 2 6 in. A.....				{Two-masted schooner..... {One funnel.....	3
4 Elcano.....	4 4" R. F.	4 6-pdr. R. F. 2 .30 cal. A..... 1 3" F.....				{Schooner..... {One funnel.....	4
5 Mindoro.....		1 6-pdr. R. F. 2 1-pdr. R. F. 2 Colts.....				{Two-masted schooner..... {One funnel.....	5
6 Pampanga.....						{Signal mast..... {One funnel.....	6
7 Paay.....						{Signal mast..... {One funnel.....	7
8 Paragua.....		1 6-pdr. R. F. 3 3-pdr. R. F. 2 1-pdr. R. F. 2 .30 cal. A.....				{Signal mast..... {One funnel.....	8
9 Quiros.....						Schooner.....	9
10 Samar.....		4 3-pdr. R. F. 2 1-pdr. R. F. 2 .30 cal. A.....				{Signal mast..... {One funnel.....	10
11 Sandoval.....		2 3-pdr. R. F. 2 1-pdr. S. A. 4 3-pdr. R. F. 4 .30 cal. A.....				{Two-masted schooner..... {One funnel..... {Schooner..... {One funnel.....	11 12

* Furnished by Bureau of Navigation, 1910.
 † Captured during war with Spain.

‡ Raised in Pasig River, October, 1899.
 † Captured in Manila Bay, June, 1898.

GUNBOATS UNDER 500 TONS—Concluded.

	Comple- ment. ^a		Net ton- nage for Suez Can- al.	Pur- chase price.	Keel laid.	Launched.	Date of comple- tion.	Date of first and latest commission.	Name.	
	Offi- cers.	Men.								
1		21	(b)					{Aug. 4, 1898 {Sept. 20, 1900	Alvarado.....	1
2	2	29	(c)	Mar., 1887	Apr., 1888	1888	{Aug. 10, 1900 {Feb. 3, 1909	Arayat.....	2	
3	2	29	(d)	Mar., 1887	June, 1888	1888	{July 31, 1898 {Dec. 20, 1902	Callao.....	3	
4	6	97	(e)		1885		Nov. 20, 1902	Elcano.....	4	
5	2	30	(e)	1886			{June 11, 1899 {May 10, 1909	Mindoro.....	5	
6	2	29	(e)	Mar., 1887	Feb., 1888	1888	{June 8, 1899 {Jan. 30, 1904	Pampanga.....	6	
7	2	20	(e)	1884		1885	{June 2, 1899 {Jan. 12, 1907	Panay.....	7	
8	2	29	(e)	Mar., 1887	Jan., 1888	1888	{May 26, 1899 {Feb. 3, 1909	Paragua.....	8	
9	3	54	(f)	June, 1894	1895	Apr., 1895	{Mar. 14, 1900 {Sept. 22, 1904	Quiros.....	9	
10	2	29	(e)	Mar., 1887	Nov., 1887	1888	{May 26, 1899 {Mar. 11, 1908	Samar.....	10	
11		23	(b)				{Sept. 2, 1898 {Sept. 20, 1900	Sandoval.....	11	
12	3	54	(f)	Sept., 1895	1896	July., 1896	{Mar. 5, 1900 {Jan. 21, 1903	Villalobos.....	12	

^a Transferred to the Navy from the Army Nov. 9, 1899.

^f Transferred to the Navy from the Army Feb. 21, 1900, together with the General Alava, at a cost of \$215,000 Mexican.

UNARMORED STEEL VESSELS—

Name and official number.	By whom and where built or building.	Condition or service June 30, 1910.	Ship fully equipped ready for sea, normal stores, ammunition, and coal.					
			Length between perpendiculars. ^a	Breadth on load water line.	Mean hull draft.	Displacement (normal).	Tons per inch immersion at normal draft.	
			<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Tons.</i>	<i>Tons.</i>	
1 Ammen (35)...	New York S. B. Co., Camden, N. J.	Building, 49% complete.	289 0	26 1½	8 4	742	12.00	1
Bainbridge (1).	Neafie & Levy, Philadelphia, Pa.	Asiatic Torpedo Fleet.	245 0	23 1	6 6	420	9.40	2
3 Barry (2)....	Neafie & Levy, Philadelphia, Pa.	Asiatic Torpedo Fleet.	245 0	23 1	6 6	420	9.40	3
4 Burrows (29)...	New York S. B. Co., Camden, N. J.	Building, 85% complete.	289 0	26 1½	8 4	742	12.00	4
5 Chauncey (3)...	Neafie & Levy, Philadelphia, Pa.	Asiatic Torpedo Fleet.	245 0	23 1	6 6	420	9.40	5
6 Dale (4).....	Wm. R. Trigg Co., Richmond, Va.	Asiatic Torpedo Fleet.	245 0	23 1	6 6	420	9.40	6
7 Decatur (5)...	Wm. R. Trigg Co., Richmond, Va.	Asiatic Torpedo Fleet.	245 0	23 1	6 6	420	9.40	7
8 Drayton (23)...	Bath Iron Works, Bath, Me.	Building, 80% complete.	289 0	26 1½	8 4	742	12.00	8
9 Flusser (20)...	Bath Iron Works, Bath, Me.	Atlantic Torpedo Fleet.	289 0	26 0	8 0	700	11.86	9
10 Hopkins (6)...	Harlan & Hollingsworth Co., Wilmington, Del.	Pacific Torpedo Fleet.	238 9	23 1½	6 0	408	9.50	10
11 Hull (7).....	Harlan & Hollingsworth Co., Wilmington, Del.	Pacific Torpedo Fleet.	238 9	23 1½	6 0	408	9.50	11
12 Lamson (18)...	Wm. Cramp & Sons, Philadelphia, Pa.	Atlantic Torpedo Fleet.	289 0	26 0	8 0	700	11.86	12
13 Lawrence (8)...	Fore River Engine Co., Weymouth, Mass.	Pacific Torpedo Fleet.	240 7	22 2½	6 2	400	8.56	13
14 McCall (28)....	New York S. B. Co., Camden, N. J.	Building, 85% complete.	289 0	26 1½	8 4	742	12.00	14
15 Macdonough (9).	Fore River Engine Co., Weymouth, Mass.	Reserve Torpedo divisions. ^b	240 7	22 2½	6 2	400	8.56	15
16 Mayrant (31)...	Wm. Cramp & Sons, Philadelphia, Pa.	Building, 79% complete.	289 0	26 1½	8 4	742	12.00	16
17 Monaghan (32)	Newport News S. B. Co., Newport N., Va.	Building, 27% complete.	289 0	26 1½	8 4	742	12.00	17
18 Patterson (36).	Wm. Cramp & Sons, Philadelphia, Pa.	Building, 33% complete.	289 0	26 1½	8 4	742	12.00	18
19 Paulding (22).	Bath Iron Works, Bath, Me.	Building, 92% complete.	289 0	26 1½	8 4	742	12.00	19
20 Paul Jones (10)	Union Iron Works, San Francisco, Cal.	Pacific Torpedo Fleet.	245 0	23 1	6 6	420	9.40	20
21 Perkins (26)...	Fore River S. B. Co., Quincy, Mass.	Building, 87% complete.	289 0	26 1½	8 4	742	12.00	21
22 Perry (11).....	Union Iron Works, San Francisco, Cal.	Pacific Torpedo Fleet.	245 0	23 1	6 6	420	9.40	22
23 Preble (12)....	Union Iron Works, San Francisco, Cal.	Pacific Torpedo Fleet.	245 0	23 1	6 6	420	9.40	23
24 Preston (19)...	New York S. B. Co., Camden, N. J.	Atlantic Torpedo Fleet.	289 0	26 0	8 0	700	11.86	24
25 Reid (21).....	Bath Iron Works, Bath, Me.	Atlantic Torpedo Fleet.	289 0	26 0	8 0	700	11.86	25
26 Roe (24).....	Newport News S. B. Co., Newport N., Va.	Building, 92% complete.	289 0	26 1½	8 4	742	12.00	26
27 Smith (17)....	Wm. Cramp & Sons, Philadelphia, Pa.	Atlantic Torpedo Fleet.	289 0	26 0	8 0	700	11.86	27
28 Sterett (27)....	Fore River S. B. Co., Quincy, Mass.	Building, 84% complete.	289 0	26 1½	8 4	742	12.00	28

^a Length on designed L. W. L.^b Does not include reserve coal.^c Estimated.

TORPEDO-BOAT DESTROYERS.

	Length over all.	Full-load displacement. ^b	Type of boilers and engines.	Highest speed on trial.	I. H. P. on trial.	Mean displacement on trial.	Bunker capacity to 6 inches below beams (43 cubic feet to the ton). ^b	Increase in capacity due to stowing to underside of beams.	Name and official number.	
	<i>Fl. in.</i>	<i>Tons.</i>		<i>Knots.</i>		<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>		
1	293 10	883	Thornycroft. Three-screw turbines, Parsons type.	c 29.50	e 12,000	c 742	e 210	.....	Ammen (35)...	1
2	250 0	592	Thornycroft. Twin screw vertical triple expansion.	28.45	e 8,000	452	169	12	Balnbridge (1)...	2
3	250 0	592	Thornycroft. Twin screw vertical triple expansion.	28.13	e 8,000	462	169	12	Barry (2).....	3
4	293 10	887	Thornycroft. Three-screw turbines, Parsons type.	c 29.50	e 12,000	c 742	e 210	.....	Burrows (29)...	4
5	250 0	592	Thornycroft. Twin screw vertical triple expansion.	28.64	e 8,000	460	169	12	Chauncey (3)...	5
6	250 0	592	Thornycroft. Twin screw vertical triple expansion.	28.00	e 8,000	457	174	12	Dale (4).....	6
7	250 0	592	Thornycroft. Twin screw vertical triple expansion.	28.10	e 8,000	450	174	12	Deatur (5)...	7
8	293 10	887	Normand. Three-screw turbines, Parsons type.	c 29.50	e 12,000	c 742	e 210	.....	Drayton (23)...	8
9	293 10	902	Normand. Three-screw turbines, Parsons type.	/ 30.41	d 11,842	686	303	13	Flusser (20)...	9
10	248 8	568	Thornycroft. Twin screw vertical triple expansion.	29.02	8,456	467	143	10	Hopkins (6)...	10
11	248 8	568	Thornycroft. Twin screw vertical triple expansion.	28.04	9,119	449	143	10	Hull (7).....	11
12	293 10	902	Mosher. Three-screw turbines, Parsons type.	/ 28.61	d 10,769	660	e 235	.....	Lamson (18)...	12
13	246 3	505	Fore River. Twin screw vertical triple expansion.	28.41	e 8,400	412	108	8	Lawrence (8)...	13
14	293 10	887	Thornycroft. Three-screw turbines, Parsons type.	e 29.50	e 12,000	c 742	e 210	.....	McCall (28)....	14
15	246 3	505	Fore River. Twin screw vertical triple expansion.	28.03	e 8,400	405	108	8	Macdonough (9)...	15
16	293 10	887	White Forster. Twin-screw turbines, Zoelly type.	e 30.00	e 12,000	c 742	e 210	.....	Mayrant (31)...	16
17	293 10	883	Thornycroft. Three-screw turbines, Parsons type.	e 29.50	e 12,000	c 742	e 210	.....	Monaghan (32)...	17
18	293 10	889	Water tube. Three-screw turbines, Parsons type.	e 29.50	e 12,000	e 742	e 210	.....	Patterson (36)...	18
19	293 10	857	Normand. Three-screw turbines, Parsons type.	/ 32.80	d 17,393	711	e 210	.....	Paulding (22)...	19
20	250 2	592	Thornycroft. Twin screw vertical triple expansion.	28.91	8,000	475	168	11	Paul Jones (10)...	20
21	293 10	893	Yarrow. Twin-screw turbines, Curtis type.	e 29.50	e 12,000	e 742	e 216	.....	Perkins (26)...	21
22	290 2	592	Thornycroft. Twin screw vertical triple expansion.	28.32	7,950	476	168	11	Perry (11).....	22
23	250 2	592	Thornycroft. Twin screw vertical triple expansion.	28.03	7,370	475	168	11	Preble (12)....	23
24	293 10	902	Thornycroft. Three-screw turbines, Parsons type.	/ 29.18	d 11,356	719	e 270	.....	Preston (19)...	24
25	293 10	902	Normand. Three-screw turbines, Parsons type.	/ 31.82	d 12,734	690	303	13	Reid (21).....	25
26	293 10	887	Thornycroft. Three-screw turbines, Parsons type.	/ 29.60	d 11,969	711	e 210	.....	Roe (24).....	26
27	293 10	902	Mosher. Three-screw turbines, Parsons type.	/ 28.35	d 10,362	716	e 235	.....	Smith (17)....	27
28	293 10	893	Yarrow. Twin-screw turbines, Curtis type.	e 29.50	e 12,000	c 742	e 216	.....	Sterett (27)....	28

^a Shaft horse-power.

^b Oil fuel.

/ 4 hour trial.

^c Navy-yard, Charleston.

UNARMORED STEEL VESSELS—

Name and official number.	By whom and where built or building.	Condition or service June 30, 1910.	Ship fully equipped ready for sea, normal stores, ammunition, and coal.					Tons per inch immersion at normal draft.	
			Length between perpendiculars.	Breadth on load water line.	Mean hull draft.	Displacement (normal).			
			<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Tons.</i>	<i>Tons.</i>		
29 Stewart (13)...	Gas Engine & Power Co. and Chas. L. Seabury & Co., Cons., Morris Heights, N. Y.	Pacific Torpedo Fleet.	245 0	23 1	6 6	420	9.40	29	
30 Terry (25).....	Newport News S. B. Co., Newp't N., Va.	Building, 90% complete.	289 0	26 1½	8 4	742	12.00	30	
31 Trippe (33)....	Bath Iron Works, Bath, Me.	Building, 50% complete.	289 0	26 1½	8 4	742	12.00	31	
32 Truxtun (14)..	Maryland Steel Co., Sparrow's Point, Md.	Pacific Torpedo Fleet.	248 0	22 ¾	6 0	433	9.56	32	
33 Walke (34)....	Fore River S. B. Co., Quincy, Mass.	Building, 30% complete.	289 0	26 1½	8 4	742	12.00	33	
34 Warrington (30).	Wm. Cramp & Sons, Philadelphia, Pa.	Building, 74% complete.	289 0	26 1½	8 4	742	12.00	34	
35 Whipple (15)..	Maryland Steel Co., Sparrow's Point, Md.	Pacific Torpedo Fleet.	248 0	22 ¾	6 0	433	9.56	35	
36 Worden (16)..	Maryland Steel Co., Sparrow's Point, Md.	Navy-yard, Charleston. ^d	248 0	22 ¾	6 0	433	9.56	36	
37 Number 37....	.....	Design being prepared.	289 0	26 1½	8 4	742	12.00	37
38 Number 38....	.....	do.....	289 0	26 1½	8 4	742	12.00	38
39 Number 39....	.....	do.....	289 0	26 1½	8 4	742	12.00	39
40 Number 40....	.....	do.....	289 0	26 1½	8 4	742	12.00	40
41 Number 41....	.....	do.....	289 0	26 1½	8 4	742	12.00	41
42 Number 42....	.....	do.....	289 0	26 1½	8 4	742	12.00	42
Total normal displacement.....						25,777			

* Length on designed L. W. L.

† Shaft horsepower.

‡ Oil fuel.

TORPEDO-BOAT DESTROYERS—Continued.

	Length over all.		Type of boilers and engines.	Highest speed on trial.	I. H. P. on trial.	Mean displacement on trial.	Huller capacity to 6 inches below beams (43 cubic feet to the ton).		Increase in capacity due to stowing to underside of beams.	Name and official number.	
	Ft. in.	Tons.					Tons.	Tons.			
29	250	6	592	Seabury..... Twin screw vertical triple expansion.	29.69	/ 8,000	439	172	12	Stewart (13)...	29
30	293	10	887	Thornycroft. Three-screw turbines, Parsons type.	/ 29.50	b/12,000	/ 742	c 210	.....	Terry (25).....	30
31	293	10	883	Mosher. Three-screw turbines, Parsons type.	/ 29.50	b/12,000	/ 742	c 210	.....	Trippe (33)....	31
32	259	6	.....	Thornycroft..... Twin screw vertical triple expansion.	29.58	/ 8,300	486	173	11	Truxtun (14)..	32
33	283	10	883	Yarrow. Twin-screw turbines, Curtis type.	/ 29.50	b/12,000	/ 742	c 210	.....	Walke (34)....	33
34	293	10	887	White Forster. Twin-screw turbines, Zoelly type.	/ 30.00	b/12,000	/ 742	c 210	.....	Warrington (30).	34
35	259	6	.....	Thornycroft..... Twin-screw vertical triple expansion.	28.24	/ 8,300	481	173	11	Whipple (15)..	35
36	259	6	.....	Thornycroft..... Twin-screw vertical triple expansion.	29.86	/ 8,300	476	173	11	Worden (16)..	36
37	293	10	883	.....	/ 29.50	b/12,000	/ 742	c 210	.....	Number 37....	37
38	293	10	883	.....	/ 29.50	b/12,000	/ 742	c 210	.....	Number 38....	38
39	293	10	883	.....	/ 29.50	b/12,000	/ 742	c 210	.....	Number 39....	39
40	293	10	883	.....	/ 29.50	b/12,000	/ 742	c 210	.....	Number 40....	40
41	293	10	883	.....	/ 29.50	b/12,000	/ 742	c 210	.....	Number 41....	41
42	293	10	883	.....	/ 29.50	b/12,000	/ 742	c 210	.....	Number 42....	42

* In reserve.

* Length on designer's L. W. L.

/ Estimated.

UNARMORED STEEL VESSELS—

Name and official number.	Batteries.		Rig and number of funnels.	Complement. ^a		Net tonnage for Suez Canal.	Contract price of hull and machinery.	Date of act authorizing the building.	
	Torpedo tubes.	Guns.		Officers.	Men.				
1 Ammen (35)...	3 twin 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Four funnels ...	4	85	\$648,000	Mar. 3, 1909	1	
2 Bainbridge (1).	2 18", long.	23" R. F. 56-pdr. S. A.	Signal pole ... Four funnels ...	3	72	229 283,000	May 4, 1898	2	
3 Barry (2).....	2 18", long.	23" R. F. 56-pdr. S. A.	Signal pole ... Four funnels ...	3	72	229 283,000	May 4, 1898	3	
4 Burrows (29)...	3 twin 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Four funnels ...	4	85	665,000	May 13, 1908	4	
5 Chauncey (3)...	2 18", long.	23" R. F. 56-pdr. S. A.	Signal pole ... Four funnels ...	3	72	229 283,000	May 4, 1898	5	
6 Dale (4).....	2 18", long.	23" R. F. 56-pdr. S. A.	Signal pole ... Four funnels ...	3	72	229 260,000	May 4, 1898	6	
7 Decatur (5)....	2 18", long.	23" R. F. 56-pdr. S. A.	Signal pole ... Four funnels ...	3	72	229 260,000	May 4, 1898	7	
8 Drayton (23)...	3 twin 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Four funnels ...	4	85	644,000	May 13, 1908	8	
9 Flusser (20)....	3 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Four funnels ...	4	85	624,000	Mar. 2, 1907	9	
10 Hopkins (6)....	2 18" long.	23" R. F. 56-pdr. S. A.	Signal pole ... Four funnels ...	3	75	291,000	May 4, 1898	10	
11 Hull (7).....	2 18" long.	23" R. F. 66-pdr. S. A.	Signal pole ... Four funnels ...	3	75	291,000	May 4, 1898	11	
12 Lamson (18)...	3 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Four funnels ...	4	85	585,000	June 29, 1906	12	
13 Lawrence (8)...	2 18", long.	76-pdr. S. A.	Signal pole ... Four funnels ...	3	75	281,000	May 4, 1898	13	
14 McCall (28)....	3 twin 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Four funnels ...	4	85	665,000	May 13, 1908	14	
15 Macdonough (9)	2 18", long.	76-pdr. S. A.	Four funnels ...	3	73	281,000	May 4, 1898	15	
16 Mayrant (31)...	3 twin 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Three funnels ...	4	85	664,000	May 13, 1908	16	
17 Monaghan (32)	3 twin 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Three funnels ...	4	85	629,000	Mar. 3, 1909	17	
18 Patterson (36)...	3 twin 18", long.	2.30 cal. A. 56-pdr. S. A.	Three funnels ...	4	85	637,000	Mar. 3, 1909	18	
19 Paulding (22)...	3 twin 18", long.	2.30 cal. A. 56-pdr. S. A.	Three funnels ...	4	85	644,000	May 13, 1908	19	
20 Paul Jones (10)	2 18", long.	23" R. F. 56-pdr. S. A.	Signal pole ... Four funnels ...	3	75	229 285,000	May 4, 1898	20	
21 Perkins (26)....	3 twin 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Three funnels ...	4	85	610,000	May 13, 1908	21	
22 Perry (11).....	2 18", long.	23" R. F. 56-pdr. S. A.	Signal pole ... Four funnels ...	3	75	229 285,000	May 4, 1898	22	
23 Preble (12)....	2 18", long.	23" R. F. 56-pdr. S. A.	Signal pole ... Four funnels ...	3	75	229 285,000	May 4, 1898	23	
24 Preston (19)...	3 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Four funnels ...	4	85	645,000	June 29, 1906	24	
25 Reid (21).....	3 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Four funnels ...	4	85	624,000	Mar. 2, 1907	25	
26 Roe (24).....	3 twin 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Three funnels ...	4	85	620,000	May 13, 1908	26	
27 Smith (17)....	3 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Four funnels ...	4	85	585,000	June 29, 1906	27	
28 Sterett (27)....	3 twin 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Three funnels ...	4	85	610,000	May 13, 1908	28	
29 Stewart (13)...	2 18", long.	23" R. F. 56-pdr. S. A.	Signal pole ... Four funnels ...	3	75	282,000	May 4, 1898	29	
30 Terry (25).....	3 twin 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Three funnels ...	4	85	620,000	May 13, 1908	30	
31 Trippe (33)....	3 twin 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Three funnels ...	4	85	650,500	Mar. 3, 1900	31	
32 Truxtun (14) ..	2 18", long.	23" R. F. 66-pdr. S. A.	Signal pole ... Four funnels ...	3	75	286,000	May 4, 1898	32	
33 Walke (34).....	3 twin 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Three funnels ...	4	85	644,000	Mar. 3, 1900	33	
34 Warrington (30)	3 twin 18", long.	53" S. A. 2.30 cal. A.	Two masts ... Three funnels ...	4	85	664,000	May 13, 1908	34	
35 Whipple (15)...	2 18", long.	23" R. F. 66-pdr. S. A.	Signal pole ... Four funnels ...	3	75	286,000	May 4, 1898	35	
36 Worden (16)...	2 18", long.	23" R. F. 66-pdr. S. A.	Signal pole ... Four funnels ...	3	73	286,000	May 4, 1898	36	

* Furnished by Bureau of Navigation, 1910

TORPEDO-BOAT DESTROYERS—Continued.

	Contract signed.	Keel laid.	Launched.	Contract date of completion.	Date of preliminary acceptance.	Date of first and latest commission.	Name and official number.	
1	June 18, 1909	Mar. 29, 1910	Sept. 20, 1910	Apr. 18, 1911	.....	.....	Ammen (35)...	1
2	Oct. 1, 1898	Aug. 15, 1899	Aug. 27, 1901	Apr. 1, 1900	Nov. 4, 1902	{Nov. 24, 1902 Apr. 2, 1908 Nov. 24, 1902 Dec. 21, 1908}	Bainbridge (1)...	2
3	Oct. 1, 1898	Sept. 2, 1899	Mar. 22, 1902	Apr. 1, 1900	Oct. 30, 1902	.....	Barry (2).....	3
4	Oct. 5, 1908	June 19, 1909	June 23, 1910	Oct. 5, 1910	.....	.....	Burrows (29)...	4
5	Oct. 1, 1898	Dec. 2, 1899	Oct. 26, 1901	Apr. 1, 1900	Oct. 22, 1902	{Nov. 20, 1902 Jan. 12, 1907 Oct. 24, 1902}	Chauncey (3)...	5
6	Nov. 16, 1898	July 12, 1899	July 24, 1900	May 16, 1900	July 17, 1902	.....	Dale (4).....	6
7	Nov. 16, 1898	July 26, 1899	Sept. 26, 1900	May 16, 1900	Apr. 1, 1902	{May 19, 1902 Apr. 22, 1910}	Decatur (5)....	7
8	Sept. 29, 1908	Aug. 19, 1909	Aug. 22, 1910	Sept. 29, 1910	.....	.....	Drayton (23)...	8
9	Sept. 28, 1907	Aug. 3, 1908	July 20, 1909	Sept. 28, 1909	Sept. 29, 1909	Oct. 28, 1909	Flusser (30)....	9
10	Oct. 19, 1898	Feb. 2, 1899	Apr. 24, 1902	Apr. 19, 1900	May 27, 1903	{Sept. 23, 1903 June 22, 1909}	Hopkins (6).....	10
11	Oct. 19, 1898	Feb. 22, 1899	June 21, 1902	Apr. 19, 1900	Mar. 18, 1903	{May 20, 1903 Nov. 14, 1906}	Hull (7).....	11
12	Oct. 10, 1907	Mar. 18, 1908	June 16, 1909	Oct. 10, 1909	Jan. 27, 1910	Feb. 10, 1910	Lamson (18)...	12
13	Dec. 3, 1898	Apr. 10, 1899	Nov. 7, 1900	Apr. 3, 1900	Apr. 7, 1903	{Apr. 14, 1903 July 23, 1907}	Lawrence (8)...	13
14	Oct. 5, 1908	June 8, 1909	June 4, 1910	Oct. 5, 1910	.....	.....	McCall (28).....	14
15	Dec. 3, 1898	Apr. 21, 1899	Dec. 24, 1900	May 3, 1900	July 3, 1903	{Sept. 5, 1903 Nov. 21, 1908}	Macdonough (9)	15
16	Oct. 1, 1908	Apr. 22, 1909	Apr. 23, 1910	Oct. 1, 1910	.....	.....	Mayrant (31)...	16
17	June 23, 1909	June 1, 1910	.....	June 23, 1911	.....	.....	Monaghan (32)...	17
18	June 14, 1909	Apr. 27, 1910	.....	June 14, 1911	.....	.....	Patterson (36)...	18
19	Sept. 29, 1908	July 24, 1909	Apr. 12, 1910	Sept. 29, 1910	.....	.....	Paulding (22)...	19
20	Oct. 5, 1898	Apr. 20, 1899	June 14, 1902	Apr. 5, 1900	July 19, 1902	{July 19, 1902 Jan. 7, 1909}	Paul Jones (10)...	20
21	Oct. 1, 1908	Mar. 22, 1909	Apr. 9, 1910	Sept. 1, 1910	.....	.....	Perkins (26)....	21
22	Oct. 5, 1898	Apr. 19, 1899	Oct. 27, 1900	Apr. 5, 1900	May 31, 1902	{Sept. 4, 1902 July 11, 1907 June 21, 1902 Sept. 17, 1909}	Perry (11).....	22
23	Oct. 5, 1898	Apr. 21, 1899	Mar. 2, 1901	Apr. 5, 1900	June 21, 1902	.....	Preble (12).....	23
24	Sept. 28, 1907	Apr. 28, 1908	July 14, 1909	Sept. 28, 1909	Dec. 21, 1909	Dec. 24, 1909	Preston (19)...	24
25	Sept. 28, 1907	Aug. 3, 1908	Aug. 17, 1909	Sept. 28, 1909	Oct. 27, 1909	Dec. 3, 1909	Reid (21).....	25
26	Oct. 12, 1908	Jan. 18, 1909	July 24, 1909	Oct. 12, 1910	Sept. 15, 1910	Sept. 17, 1910	Roe (24).....	26
27	Oct. 10, 1907	Mar. 18, 1908	Apr. 20, 1909	Oct. 10, 1909	Nov. 24, 1909	Nov. 26, 1909	Smith (17).....	27
28	Oct. 1, 1908	Mar. 22, 1909	May 12, 1910	Oct. 1, 1910	.....	.....	Sterett (27)....	28
29	Sept. 30, 1898	Jan. 24, 1900	May 10, 1902	Feb. 28, 1900	Nov. 14, 1902	{Dec. 17, 1902 Nov. 18, 1909}	Stewart (13)...	29
30	Oct. 12, 1908	Feb. 8, 1909	Aug. 21, 1909	Oct. 12, 1910	.....	.....	Terry (25).....	30
31	June 15, 1909	Apr. 12, 1910	.....	June 15, 1911	.....	.....	Trippe (33)....	31
32	Oct. 4, 1898	Nov. 13, 1899	Aug. 15, 1901	Apr. 4, 1900	Aug. 16, 1902	{Sept. 11, 1902 Nov. 18, 1907}	Truxtun (14)...	32
33	June 29, 1909	Mar. 5, 1910	.....	June 29, 1911	.....	.....	Walke (34).....	33
34	Oct. 1, 1908	June 21, 1909	June 18, 1910	Oct. 1, 1910	.....	.....	Warrington (30)	34
35	Oct. 4, 1898	Nov. 13, 1899	Aug. 15, 1901	Apr. 4, 1900	Oct. 9, 1902	{Oct. 21, 1902 July 16, 1906 Dec. 31, 1902 May 12, 1909}	Whipple (15)...	35
36	Oct. 4, 1898	Nov. 13, 1899	Aug. 15, 1901	Apr. 4, 1900	Oct. 17, 1902	.....	Worden (16)...	36

† Subject to possible change.

UNARMORED STEEL VESSELS—

Name and official number.	Batteries.		Rig and number of funnels.	Complement.		Net tonnage for Suez Canal.	Contract price of hull and machinery.	Date of act authorizing the building
	Torpedo tubes.	Guns.		Officers.	Men.			
37 Number 37.....	{ twin 18", long.	{ 5 3" S. A. 2 .30 cal. A. . .	{ Two masts. . . . Three funnels. . .	{ 4 82	{	{ \$750,000	{ June 24, 1910	37
38 Number 38.....	{ twin 18", long.	{ 6 3" S. A. 2 .30 cal. A. . .	{ Two masts. . . . Three funnels. . .	{ 4 82	{	{ \$750,000	{ June 24, 1910	38
39 Number 39.....	{ twin 18", long.	{ 5 3" S. A. 2 .30 cal. A. . .	{ Two masts. . . . Three funnels. . .	{ 4 82	{	{ \$750,000	{ June 24, 191	39
40 Number 40.....	{ twin 18", long.	{ 5 3" S. A. 2 .30 cal. A. . .	{ Two masts. . . . Three funnels. . .	{ 4 82	{	{ \$750,000	{ June 24, 1910	40
41 Number 41.....	{ twin 18", long.	{ 5 3" S. A. 2 .30 cal. A. . .	{ Two masts. . . . Three funnels. . .	{ 4 82	{	{ \$750,000	{ June 24, 1910	41
42 Number 42.....	{ twin 18", long.	{ 5 3" S. A. 2 .30 cal. A. . .	{ Two masts. . . . Three funnels. . .	{ 4 82	{	{ \$750,000	{ June 24, 1910	42

* Limit of cost.

TORPEDO-BOAT DESTROYERS—Concluded.

	Contract signed.	Keel laid.	Launched.	Contract date of completion.	Date of preliminary acceptance.	Date of first and latest commission.	Name and official number.
37	Number 37..... 37
38	Number 38..... 38
39	Number 39..... 39
40	Number 40..... 40
41	Number 41..... 41
42	Number 42..... 42

UNARMORED STEEL

Name and official number.	By whom and where built or building.	Condition or service June 30, 1910.	Ship fully equipped ready for sea, all stores on board; normal coal supply.					Full-load displacement.
			Length on load water line.	Extreme breadth.	Mean draft.	Displacement.		
			<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Tons.</i>	<i>Tons.</i>	
1 Bagley (24).....	Bath Iron Works, Bath, Me.	Naval Academy..	157 0	17 7½	4 11	175	211	1
2 Bailey (21).....	Gas Engine and Power Co., and Chas. L. Seabury & Co., Consolidated, Morris Heights, N. Y.	Reserve torpedo divisions. ^a	205 0	19 3	6 10	280	379	2
3 Barney (25).....	Bath Iron Works, Bath, Me.	Reserve torpedo divisions. ^a	157 0	17 7½	4 11	175	211	3
4 Biddle (26).....	Bath Iron Works, Bath, Me.	Reserve torpedo divisions. ^a	157 0	17 7½	4 11	175	211	4
5 Blakely (27).....	Lawley & Sons, South Boston, Mass.	Reserve torpedo divisions. ^a	175 1	17 9	5 11	196	262	5
6 Cushing (1).....	Herreshoff Mfg. Co., Bristol, R. I.	Reserve torpedo divisions. ^a	138 9	14 3	4 10	105	142	6
7 Dahlgren (9).....	Bath Iron Works, Bath, Me.	Reserve torpedo divisions. ^a	147 0	16 4½	4 7	146	.....	7
8 Davis (12).....	Wolf & Zwickler, Portland, Oreg.	Reserve torpedo divisions. ^a	146 0	15 4	5 10	154	155	8
9 De Long (28).....	Lawley & Sons, South Boston, Mass.	Reserve torpedo divisions. ^a	175 1	17 9	5 11	196	262	9
10 Dupont (7).....	Herreshoff Mfg. Co., Bristol, R. I.	Naval Militia, North Carolina.	175 0	17 8½	4 8	165	.....	10
11 Ericsson (2).....	Iowa Iron Works, Dubuque, Iowa.	Reserve torpedo divisions. ^a	149 7	15 6	4 9	120	170	11
12 Farragut (11).....	Union Iron Works, San Francisco, Cal.	Reserve torpedo divisions. ^a	213 6	20 8	6 0	279	340	12
13 Foote (3).....	Columbian Iron Works, Balt., Md.	Naval Militia, Massachusetts.	160 0	16 1	5 0	142	180	13
14 Fox (13).....	Wolf & Zwickler, Portland, Oreg.	Reserve torpedo divisions. ^a	146 0	15 4	5 10	154	155	14
15 Goldsborough (20).....	Wolf & Zwickler, Portland, Oreg.	Pacific torpedo fleet.	198 0	20 7	6 10	255	.....	15
16 Gwin (16).....	Herreshoff Mfg. Co., Bristol, R. I.	Torpedo station, Newport.	99 6	12 6	3 3	46	58	16
17 McKee (18).....	Columbian Iron Works, Balt., Md.	Torpedo station, Newport.	99 3	12 9	4 3	65	.....	17
18 Mackenzie (17).....	The Chas. Hillman Co., Phila., Pa.	Reserve torpedo divisions. ^a	99 3	12 9	4 3	65	75	18
19 Manly (23) ^e	Yarrow.....	Naval Academy..	60 8	9 5	.....	/ 30	.....	19
20 Morris (14).....	Herreshoff Mfg. Co., Bristol, R. I.	Torpedo station, Newport.	138 3	15 6	4 1	105	124	20
21 Porter (6).....	Herreshoff Mfg. Co., Bristol, R. I.	Reserve torpedo divisions. ^a	175 0	17 8½	4 8	165	.....	21
22 Rodgers (4).....	Columbian Iron Works, Balt., Md.	Naval Militia, Massachusetts.	160 0	16 1	5 0	142	180	22
23 Rowan (8).....	Moran Brothers Co., Seattle, Wash.	Pacific torpedo fleet.	170 0	17 0	5 11	210	.....	23
24 Shubrick (31).....	Wm. R. Trigg Co., Richmond, Va.	Reserve torpedo divisions. ^a	175 0	17 6	5 2	200	269	24

^a Navy-yard, Charleston.^b Subject to possible change.^c Estimated.

VESSELS—TORPEDO BOATS.

	Tonnage.		Type of engines and boilers.	Highest speed on trial.	Indicated horsepower on trial.	Mean displacement on trial.	Tons per inch immersion at normal draft.	Bunker capacity at 43 cubic feet per ton.	Name and official number.
	Gross.	Net for Suez Canal.							
1	Tons. 151	Tons. 68	Twin screw vertical triple expansion; Normand.	Knots. 29.15	¢ 4,200	Tons. 167	4.40	Tons. 43	Bagley (24)..... 1
2	♠ 314	.....	Twin screw vertical triple expansion; Normand.	30.20	¢ 5,600	280	7.05	99	Bailey (21)..... 2
3	151	68	Twin screw vertical triple expansion; Normand.	29.04	¢ 4,200	167	4.40	43	Barney (25)..... 3
4	151	68	Twin screw vertical triple expansion; Normand.	28.57	¢ 4,200	168	4.40	43	Biddle (26)..... 4
5	♠ 224	.....	Twin screw vertical triple expansion; Thornycroft.	25.58	¢ 3,000	192	5.30	72	Blakely (27)..... 5
6	♠ 98	.....	Twin screw vertical quadruple expansion; Thornycroft.	22.50	1,720	103	3.10	36	Cushing (1)..... 6
7	♠ 121	.....	Twin screw vertical triple expansion; Normand.	30.00	¢ 4,200	.....	4.08	¢ 32	Dahlgren (9)..... 7
8	♠ 121	.....	Twin screw vertical triple expansion; Thornycroft.	23.41	¢ 1,750	.....	3.68	40	Davis (12)..... 8
9	♠ 224	.....	Twin screw vertical triple expansion; Thornycroft.	25.52	¢ 3,000	192	5.30	72	De Long (28)..... 9
10	♠ 196	.....	Twin screw vertical triple expansion; Normand.	28.58	.....	.....	4.52	76	Dupont (7)..... 10
11	♠ 115	.....	Twin screw vertical quadruple expansion; Thornycroft.	¢ 24.00	¢ 1,800	.....	3.56	36	Ericsson (2)..... 11
12	♠ 355	♠ 160	Twin screw vertical triple expansion; Thornycroft.	30.13	5,878	236	7.20	95	Farragut (11)..... 12
13	♠ 142	.....	Twin screw vertical triple expansion; Mosher.	24.53	¢ 2,000	.....	4.07	44	Foote (3)..... 13
14	♠ 121	.....	Twin screw vertical triple expansion; Thornycroft.	23.13	¢ 1,750	.....	3.68	40	Fox (13)..... 14
15	♠ 293	.....	Twin screw vertical triple expansion; Thornycroft.	27.40	¢ 6,000	256	6.33	89	Goldsbrough(20) 15
16	♠ 54	.....	Single screw vertical triple expansion; Normand.	20.88	¢ 850	46	1.87	9	Gwin (16)..... 16
17	♠ 55	.....	Single screw vertical triple expansion; Thornycroft.	19.82	¢ 850	78	2.10	.....	McKee (18)..... 17
18	♠ 55	.....	Single screw vertical triple expansion; Thornycroft.	20.11	¢ 850	.....	.....	¢ 15	Mackenzie (17).... 18
19	.....	.....	Single screw.....	.....	.....	.....	.....	.....	Manly (23)..... 19
20	♠ 119	.....	Twin screw vertical triple expansion; Normand.	24.00	¢ 1,750	98	.....	26	Morris (14)..... 20
21	♠ 190	.....	Twin screw vertical triple expansion; Normand.	28.63	.....	.....	4.52	76	Porter (6)..... 21
22	♠ 142	.....	Twin screw vertical triple expansion; Mosher.	24.49	2,295	143	4.07	44	Rodgers (4)..... 22
23	♠ 174	.....	Twin screw vertical quadruple expansion; Mosher.	27.07	¢ 3,200	.....	4.65	63	Rowan (8)..... 23
24	231	104	Twin screw vertical triple expansion; Thornycroft.	26.07	3,375	189	5.40	82	Shubrick (31).... 24

♠ Navy-yard, Mare Island.

¢ Purchased during war with Spain.

/ Approximate.

UNARMORED STEEL VESSELS—

Name and official number.	By whom and where built or building.	Condition or service June 30, 1910.	Ship fully equipped ready for sea, all stores on board; normal coal supply.					Full-load displacement.
			Length on load water line.	Extreme breadth.	Mean draft.	Displacement.		
25 Somers (22) ^a	Schichau Works, Elbing, Germany.	Naval Militia, Maryland.	<i>Ft. in.</i> 149 4	<i>Ft. in.</i> 17 6	<i>Ft. in.</i> 5 10	<i>Tons.</i> 150	<i>Tons.</i>	25
26 Stockton (32).....	Wm. R. Trigg Co., Richmond, Va.	Reserve torpedo divisions. ^c	175 0	17 6	5 2	200	260	26
27 Stringham (19)....	Harlan & Hollingsworth Co., Wilmington, Del.	Reserve torpedo divisions. ^c	225 0	22 0	6 6	340	401	27
28 Talbot (15).....	Herreshoff Mfg. Co., Bristol, R. I.	Torpedo station, Newport.	99 6	12 6	3 3	46	58	28
29 T.A.M. Craven (10)	Bath Iron Works, Bath, Me.	Reserve torpedo divisions. ^c	147 0	16 4½	4 7	146	.....	29
30 Thornton (33).....	Wm. R. Trigg Co., Richmond, Va.	Reserve torpedo divisions. ^c	175 0	17 6	5 2	200	260	30
31 Tingey (34).....	Columbian Iron Works, Balt., Md.	Reserve torpedo divisions. ^c	175 0	17 6	4 8	165	.....	31
32 Wilkes (35).....	Gas Engine and Power Co., and Chas. L. Seabury & Co., Consolidated, Morris Heights, N. Y.	Reserve torpedo divisions. ^c	175 0	17 7½	4 8	165	261	32
33 Winslow (5) ^e	Columbian Iron Works, Balt., Md.	Navy-yard, Boston. /	160 0	16 1	5 0	142	180	33
Total displacement.....						5,299		

WOOD TOR

1	Stiletto.....	Herreshoff Mfg. Co., Bristol, R. I.	Torpedo station, Newport.	88 6	11 0	3 0	31	1
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^a Purchased during war with Spain.^b Estimated.^c Navy-yard, Charleston.

TORPEDO BOATS—Continued.

Tonnage.		Type of engines and boilers.	Highest speed on trial.	Indicated horsepower on trial.	Mean displacement on trial.	Tons per inch immersion at normal draft.	Bunker capacity at 43 cubic feet per ton.	Name and official number.
Gross.	Net for Suez Canal.							
Tons.	Tons.		Knots.		Tons.	Tons.		
25	.....	Single screw vertical quadruple expansion; locomotive.	^b 17.50	^b 1,900	147	3.75	37	Somers (22)..... 25
26	231 104	Twin screw vertical triple expansion; Thornycroft.	25.79	^b 3,275	197	5.40	79	Stockton (32)..... 26
27	^d 402	Twin screw vertical triple expansion; Thornycroft.	25.33	^b 7,200	378	8.25	95	Stringham (19)... 27
28	^d 54	Single screw vertical triple expansion; Normand.	21.15	^b 850	46	1.87	8	Talbot (15)..... 28
29	^d 121	Twin screw vertical triple expansion; Normand.	30.00	^b 4,200	.....	4.08	^b 32	T. A. M. Craven (10) 29
30	231 104	Twin screw vertical triple expansion; Thornycroft.	24.88	^b 3,000	193	5.40	85	Thornton (33).... 30
31	229 103	Twin screw vertical triple expansion; Thornycroft.	24.94	^b 3,000	190	5.40	73	Tingey (34)..... 31
32	^d 225	Twin screw vertical triple expansion; Seabury.	25.99	3,495	205	5.62	66	Wilkes (35)..... 32
33	^d 142	Twin screw vertical triple expansion; Mosher.	24.82	^b 2,000	137	4.07	44	Winslow (5)..... 33

PEDO BOAT.

1	Single screw vertical compound; Almy water tube.	18.22	359	4	Stiletto..... 1
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^d Subject to possible change. ^b Stricken from the Navy list July 12, 1910. / Out of commission.

UNARMORED STEEL VESSELS—

	Name and official number.	Batteries.		Complement. ^a		Contract price of hull and machinery.	Date of act authorizing the building.	
		Torpedo tubes.	Guns.	Offic-ers.	Men.			
1	Bagley (24).....	3 18" Whitehead.	Long.....	3 1-pdr. R. F..	2 26	\$161,000	May 4, 1898	1
2	Bailey (21).....	2 18" Whitehead.....		4 6-pdr. R. F..	2 56	210,000	Mar. 3, 1897	2
3	Barney (25).....	3 18" Whitehead.	Long.....	3 1-pdr. R. F..	2 27	161,000	May 4, 1898	3
4	Biddle (26).....	3 18" Whitehead.	Long.....	3 1-pdr. R. F..	2 26	161,000	May 4, 1898	4
5	Blakely (27).....	3 18" Whitehead.	Long.....	3 1-pdr. R. F..	2 30	159,400	May 4, 1898	5
6	Cushing (1).....	2 18" Whitehead.....		3 1-pdr. R. F..	2 21	82,750	Aug. 3, 1886	6
7	Dahlgren (9).....	2 18" Whitehead.	Long.....	4 1-pdr. R. F..	2 26	194,000	June 10, 1896	7
8	Davis (12).....	3 18" Whitehead.	Long.....	3 1-pdr. R. F..	2 26	81,546	June 10, 1896	8
9	De Long (28).....	3 18" Whitehead.	Long.....	3 1-pdr. R. F..	2 30	159,400	May 4, 1898	9
10	Dupont (7).....	3 18" Whitehead.	Long.....	4 1-pdr. R. F..	2 30	144,000	Mar. 2, 1895	10
11	Ericsson (2).....	3 18" Whitehead.....		4 1-pdr. R. F..	2 21	113,500	June 30, 1890	11
12	Farragut (11).....	2 18" Whitehead.....		4 6-pdr. R. F..	2 57	227,500	June 10, 1896	12
13	Foote (3).....	2 18" Whitehead.	Long.....	3 1-pdr. R. F..	2 26	97,500	July 26, 1894	13
14	Fox (13).....	3 18" Whitehead.	Long.....	3 1-pdr. R. F..	2 26	81,546	June 10, 1896	14
15	Goldsborough (20).....	2 18" Whitehead.	Long.....	4 6-pdr. R. F..	3 57	214,500	Mar. 3, 1897	15
16	Gwin (16).....	2 18" Whitehead.....		1 1-pdr. R. F..	2 13	39,000	June 10, 1896	16
17	McKee (18).....	2 18" Whitehead.....		2 1-pdr. R. F..	13	45,000	June 10, 1896	17
18	Mackenzie (17).....	2 18" Whitehead.....		1 1-pdr. R. F..	2 13	48,500	June 10, 1896	18
19	Manly (23).....				5			19
20	Morris (14).....	3 18" Whitehead.	Long.....	4 1-pdr. R. F..	2 21	85,000	June 10, 1896	20
21	Porter (6).....	3 18" Whitehead.	Long.....	4 1-pdr. R. F..	2 30	144,000	Mar. 2, 1895	21
22	Rodgers (4).....	2 18" Whitehead.	Long.....	3 1-pdr. R. F..	2 24	97,500	July 26, 1894	22
23	Rowan (8).....	2 18" Whitehead.	Long.....	4 1-pdr. R. F..	2 30	160,000	Mar. 2, 1895	23
24	Shubrick (31).....	3 18" Whitehead.	Long.....	3 1-pdr. R. F..	2 26	129,750	May 4, 1898	24
25	Somers (22).....	2 18" Whitehead.....	1 submerged bow.....	4 1-pdr. R. F..	21			25
26	Stockton (32).....	3 18" Whitehead.	Long.....	3 1-pdr. R. F..	2 27	129,750	May 4, 1898	26
27	Stringham (19).....	2 18" Whitehead.	Long.....	4 6-pdr. R. F..	3 55	236,000	Mar. 3, 1897	27
28	Talbot (15).....	2 18" Whitehead.....		1 1-pdr. R. F..	2 13	39,000	June 10, 1896	28
29	T. A. M. Craven (10).....	2 18" Whitehead.	Long.....	4 1-pdr. R. F..	2 26	194,000	June 10, 1896	29
30	Thornton (33).....	3 18" Whitehead.	Long.....	3 1-pdr. R. F..	2 30	129,750	May 4, 1898	30
31	Tingey (34).....	3 18" Whitehead.	Long.....	3 1-pdr. R. F..	2 30	168,000	May 4, 1898	31
32	Wilkes (35).....	3 18" Whitehead.	Long.....	3 1-pdr. R. F..	2 30	146,000	May 4, 1898	32
33	Winslow (5).....	2 18" Whitehead.	Long.....	3 1-pdr. R. F..	2 26	97,500	July 26, 1894	33

WOOD TOR

1	Stiletto.....	2 Howell.....			5	\$25,000		1
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^a Furnished by Bureau of Navigation, 1910.

TORPEDO BOATS—Concluded.

	Contract signed.	Keel laid.	Launched.	Contract date of completion.	Date of preliminary acceptance.	Date of first and latest commission.	Name and official number.	
1	Oct. 19, 1898	Jan. 4, 1900	Sept. 25, 1900	Oct. 19, 1899	June 12, 1901	Oct. 18, 1901	Bagley (24).....	1
2	July 28, 1897	Apr. 30, 1898	Dec. 5, 1899	Jan. 28, 1899	May 29, 1901	June 10, 1901 Jan. 27, 1904	Bailey (21).....	2
3	Oct. 19, 1898	Jan. 3, 1900	July 28, 1900	Oct. 19, 1899	May 31, 1901	Oct. 21, 1901 July 1, 1908	Barney (25)....	3
4	Oct. 19, 1898	Feb. 21, 1900	May 18, 1901	Oct. 19, 1899	Aug. 5, 1901	Oct. 26, 1901 May 14, 1909	Biddle (26).....	4
5	Sept. 27, 1898	Jan. 12, 1899	Nov. 22, 1900	Sept. 27, 1899	Sept. 14, 1904	Dec. 27, 1904 May 6, 1909	Blakely (27)....	5
6	Mar. 1, 1888	Apr., 1888	Jan. 23, 1890	June 1, 1889	Apr. 12, 1890	Apr. 22, 1890	Cushing (1).....	6
7	Oct. 6, 1896	Dec. 11, 1897	May 29, 1899	Apr. 6, 1898	Nov. 24, 1899	Oct. 29, 1901 June 16, 1900	Dahlgren (9)....	7
8	Oct. 6, 1896	Mar. 2, 1897	June 4, 1898	Oct. 6, 1897	Jan. 26, 1899	May 10, 1899 Mar. 23, 1908	Davis (12).....	8
9	Sept. 27, 1898	Jan. 24, 1899	Nov. 23, 1900	Sept. 27, 1899	Aug. 11, 1902	Oct. 27, 1902 Apr. 30, 1910	De Long (28)...	9
10	Oct. 19, 1895	Feb., 1896	Mar. 30, 1897	Nov. 19, 1896	Sept. 17, 1897	Sept. 23, 1897 May 14, 1906	Dupont (7).....	10
11	Oct. 8, 1891	July 21, 1892	May 12, 1894	Oct. 8, 1892	June 16, 1896	Feb. 18, 1897 Mar. 22, 1899	Ericsson (2)....	11
12	Oct. 5, 1896	July 23, 1897	July 16, 1898	Apr. 5, 1898	Jan. 30, 1899	Mar. 23, 1908	Farragut (11)...	12
13	May 3, 1895	May 1, 1896	Oct. 1, 1896	Aug. 3, 1896	July 28, 1897	Aug. 7, 1897 Nov. 9, 1900	Foote (3).....	13
14	Oct. 6, 1896	Mar. 4, 1897	July 4, 1898	Oct. 6, 1897	Mar. 13, 1899	July 8, 1899 Mar. 23, 1908	Fox (13).....	14
15	July 30, 1897	July 14, 1898	July 29, 1899	Jan. 30, 1899	.....	Apr. 9, 1908	Goldsbrough (20).	15
16	Oct. 6, 1896	Apr. 14, 1897	Nov. 15, 1897	Oct. 6, 1897	Mar. 26, 1898	Apr. 4, 1898 July 10, 1903	Gwin (16).....	16
17	Oct. 7, 1896	Sept. 11, 1897	Mar. 5, 1898	Oct. 7, 1897	May 24, 1898	May 16, 1898 Aug. 6, 1904	McKee (18).....	17
18	Oct. 7, 1896	Apr. 15, 1897	Feb. 19, 1898	Oct. 7, 1897	Jan. 7, 1899	May 1, 1899 Nov. 7, 1902	Mackenzie (17).	18
19	.....	.....	.....	.....	.....	.....	Manly (23).....	19
20	Oct. 6, 1896	Nov. 17, 1897	Apr. 13, 1898	Oct. 6, 1897	May 12, 1898	May 11, 1898 Dec. 26, 1906	Morris (14).....	20
21	Oct. 19, 1895	Feb., 1896	Sept. 9, 1896	Aug. 19, 1896	Feb. 12, 1897	Feb. 20, 1897 May 14, 1909	Porter (6).....	21
22	May 3, 1895	May 6, 1896	Nov. 10, 1896	Aug. 3, 1896	Apr. 19, 1898	Apr. 2, 1898 Apr. 19, 1905	Rodgers (4)....	22
23	Oct. 19, 1895	June 22, 1896	Apr. 8, 1898	Jan. 19, 1897	Jan. 31, 1899	Apr. 1, 1899 Dec. 21, 1909	Rowan (8).....	23
24	Nov. 16, 1898	Mar. 11, 1899	Oct. 31, 1899	Nov. 16, 1899	May 31, 1901	.....	Shubrick (31)..	24
25	.....	.....	.....	.....	.....	May 14, 1909 Mar. 28, 1898	Somers (22)....	25
26	Nov. 16, 1898	Mar. 18, 1899	Dec. 27, 1899	Nov. 16, 1899	Jan. 18, 1901	July 3, 1902 Nov. 16, 1902	Stockton (32)..	26
27	July 29, 1897	Mar. 21, 1898	June 10, 1899	Jan. 29, 1899	.....	May 14, 1909 Nov. 7, 1905	Stringham (19).	27
28	Oct. 6, 1896	Apr. 8, 1897	Nov. 14, 1897	Oct. 6, 1897	Mar. 26, 1898	Aug. 14, 1909 Apr. 4, 1898	Talbot (15).....	28
29	Oct. 6, 1896	Dec. 6, 1897	Sept. 25, 1899	Apr. 6, 1898	Mar. 20, 1900	Aug. 31, 1906 June 9, 1900	T. A. M. Craven (10).	29
30	Nov. 16, 1898	Mar. 16, 1899	May 15, 1900	Nov. 16, 1899	Apr. 1, 1902	June 9, 1902 June 19, 1907	Thornton (33)..	30
31	Oct. 1, 1898	Mar. 29, 1899	Mar. 25, 1901	Oct. 1, 1899	Dec. 15, 1903	Jan. 7, 1904 Dec. 11, 1907	Tingey (34)....	31
32	Sept. 30, 1898	June 3, 1899	Sept. 28, 1901	Sept. 30, 1899	June 27, 1902	Sept. 18, 1902 Nov. 23, 1908	Wilkes (35)....	32
33	May 3, 1895	May 8, 1896	Jan. 6, 1897	Aug. 3, 1896	Dec. 30, 1897	Dec. 29, 1897 Feb. 16, 1906	Winslow (5)....	33

PEDO BOAT.

1	Stiletto.....	1
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* Limit of cost.

UNARMORED STEEL VESSELS—

	Name and official number.	Contractor.	By whom and where built or building.	
1	Adder (3).....	J. P. Holland Torpedo Boat Co., New York, N. Y.	Crescent Shipyard, Elizabethport, N. J.	} 1
2	Barracuda (21) ^b	The Electric Boat Co., New York, N. Y.	Union Iron Works, San Francisco, Cal.		2
3	Bonita (15).....	The Electric Boat Co., New York, N. Y.	Fore River S. B. Co., Quincy, Mass.	3
4	Carp (20) ^b	The Electric Boat Co., New York, N. Y.	Union Iron Works, San Francisco, Cal.	4
5	Cuttlefish (11).....	The Electric Boat Co., New York, N. Y.	Fore River S. B. Co., Quincy, Mass.	5
6	Grampus (4).....	J. P. Holland Torpedo Boat Co., New York, N. Y.	Union Iron Works, San Francisco, Cal.	6
7	Grayling (18).....	The Electric Boat Co., New York, N. Y.	Fore River S. B. Co., Quincy, Mass.	7
8	Holland (2).....	J. P. Holland Torpedo Boat Co., New York, N. Y.	Crescent Shipyard, Elizabethport, N. J.	} 8
9	Moocasin (5).....	J. P. Holland Torpedo Boat Co., New York, N. Y.	Crescent Shipyard, Elizabethport, N. J.		9
10	Narwhal (17).....	The Electric Boat Co., New York, N. Y.	Fore River S. B. Co., Quincy, Mass.	10
11	Octopus (9).....	The Electric Boat Co., New York, N. Y.	Fore River S. B. Co., Quincy, Mass.	11
12	Pickrel (22) ^b	The Electric Boat Co., New York, N. Y.	The Moran Co., Seattle, Wash.	12
13	Pike (6).....	J. P. Holland Torpedo Boat Co., New York, N. Y.	Union Iron Works, San Francisco, Cal.	} 13
14	Plunger (1).....	J. P. Holland Torpedo Boat Co., New York, N. Y.	Crescent Shipyard, Elizabethport, N. J.		14
15	Porpoise (7).....	J. P. Holland Torpedo Boat Co., New York, N. Y.	Crescent Shipyard, Elizabethport, N. J.	15
16	Salmon (19) ^b	The Electric Boat Co., New York, N. Y.	Fore River S. B. Co., Quincy, Mass.	16
17	Seal ^c	Lake Torpedo Boat Co., Bridgeport, Conn.	Newport News S. B. Co., Newport News, Va.	17
18	Shark (8).....	J. P. Holland Torpedo Boat Co., New York, N. Y.	Crescent Shipyard, Elizabethport, N. J.	18
19	Skate (23) ^b	The Electric Boat Co., New York, N. Y.	The Moran Co., Seattle, Wash.	19
20	Skipjack (24) ^b	The Electric Boat Co., New York, N. Y.	Fore River S. B. Co., Quincy, Mass.	20
21	Snapper (16).....	The Electric Boat Co., New York, N. Y.	Fore River S. B. Co., Quincy, Mass.	21
22	Stingray (13).....	The Electric Boat Co., New York, N. Y.	Fore River S. B. Co., Quincy, Mass.	22
23	Sturgeon (25) ^b	The Electric Boat Co., New York, N. Y.	Fore River S. B. Co., Quincy, Mass.	23
24	Tarantula (12).....	The Electric Boat Co., New York, N. Y.	} Fore River S. B. Co., Quincy, Mass.	24
25	Tarpon (14).....	The Electric Boat Co., New York, N. Y.		Fore River S. B. Co., Quincy, Mass.	25
26	Thrasher (26) ^b	American Laurenti Co., Philadelphia, Pa.	Wm. Cramp & Sons, Philadelphia, Pa.	26
27	Tuna (27) ^b	Lake Torpedo Boat Co., Bridgeport, Conn.	Newport News S. B. Co., Newport News, Va.	27
28	Viper (10).....	The Electric Boat Co., New York, N. Y.	} Fore River S. B. Co., Quincy, Mass.	28
29	Number 28 ^f	The Electric Boat Co., New York, N. Y.		.....	29
30	Number 29 ^f	The Electric Boat Co., New York, N. Y.	.....	30
31	Number 30 ^f	The Electric Boat Co., New York, N. Y.	.....	31
32	Number 31 ^f	Lake Torpedo Boat Co., Bridgeport, Conn.	.....	32
33	Number 22 ^f.....	.....	.....	33
34	Number 33 ^f.....	.....	.....	34
35	Number 34 ^f.....	.....	.....	35
36	Number 35 ^f.....	.....	.....	36

^a Together with acts of June 10, 1896, and Mar. 3, 1899. ^b Building. ^c Together with act of Mar. 2, 1907.

SUBMARINE TORPEDO BOATS.

	Date of act authorizing the building.	Contract signed.	Contract date of completion.	Date of preliminary acceptance.	Date of first and latest commission.	Name and official number.	
1	June 7, 1900 ^a	Aug. 25, 1900	Apr. 25, 1901	Jan. 9, 1903	{Jan. 12, 1903 Feb. 10, 1910	Adder (3).....	1
2	May 13, 1908	Mar. 5, 1909	June 5, 1911	.....	.....	Barracuda (21).....	2
3	June 29, 1906 ^c	Nov. 19, 1907	Sept. 19, 1909	Oct. 20, 1909	Nov. 23, 1909	Bonita (15).....	3
4	May 13, 1908	Mar. 5, 1909	June 5, 1911	.....	.....	Carp (20).....	4
5	Apr. 27, 1904	Mar. 18, 1905	Sept. 18, 1906	Oct. 12, 1907	{Oct. 18, 1907 Apr. 15, 1910	Cuttlefish (11).....	5
6	June 7, 1900 ^a	Aug. 25, 1900	Apr. 25, 1901	May 11, 1903	{May 28, 1903 June 9, 1908	Grampus (4).....	6
7	June 29, 1906 ^c	Nov. 23, 1907	Nov. 23, 1909	Oct. 11, 1909	Nov. 23, 1909	Grayling (18).....	7
8	.....	.....	Apr. 11, 1900 ^d	.....	Oct. 12, 1900	Holland (2).....	8
9	June 7, 1900 ^a	Aug. 25, 1900	May 25, 1901	Jan. 13, 1903	{Jan. 17, 1903 Feb. 10, 1910	Moccasin (5).....	9
10	June 29, 1906 ^c	Nov. 23, 1907	Nov. 23, 1909	Oct. 7, 1909	Nov. 23, 1909	Narwhal (17).....	10
11	Apr. 27, 1904	Mar. 6, 1905	Sept. 6, 1906	June 23, 1908	June 30, 1908	Octopus (9).....	11
12	May 13, 1908	Mar. 5, 1909	Aug. 5, 1911	.....	.....	Pickarel (22).....	12
13	June 7, 1900 ^a	Aug. 25, 1900	May 25, 1901	May 11, 1903	{May 28, 1903 June 9, 1908	Pike (6).....	13
14	Mar. 3, 1899 ^a	Nov. 19, 1900	Oct. 19, 1901	June 24, 1903	{Sept. 19, 1903 Feb. 25, 1907	Plunger (1).....	14
15	June 7, 1900 ^a	Aug. 25, 1900	June 25, 1901	June 24, 1903	Sept. 19, 1903	Porpoise (7).....	15
16	June 29, 1906 ^c	Nov. 23, 1907	Dec. 23, 1909	.....	Sept. 8, 1910	Salmon (19).....	16
17	June 29, 1906 ^c	Feb. 3, 1908	May 3, 1910	.....	.....	Seal.....	17
18	June 7, 1900 ^a	Aug. 25, 1900	July 25, 1901	June 24, 1903	Sept. 19, 1903	Shark (8).....	18
19	May 13, 1908	Mar. 5, 1909	Aug. 5, 1911	.....	.....	Skate (23).....	19
20	May 13, 1908	June 3, 1909	Aug. 3, 1911	.....	.....	Skipjack (24).....	20
21	June 29, 1906 ^c	Nov. 19, 1907	Sept. 19, 1909	Dec. 22, 1909	Feb. 2, 1910	Snapper (16).....	21
22	June 29, 1906 ^c	Nov. 19, 1907	July 19, 1909	Oct. 16, 1909	Nov. 23, 1909	Stingray (13).....	22
23	May 13, 1908	June 3, 1909	Aug. 3, 1911	.....	.....	Sturgeon (25).....	23
24	Apr. 27, 1904	Mar. 18, 1905	Sept. 18, 1906	Nov. 11, 1907	{Dec. 3, 1907 Apr. 15, 1910	Tarantula (12).....	24
25	June 29, 1906 ^c	Nov. 19, 1907	July 19, 1909	Oct. 14, 1909	Nov. 23, 1909	Tarpon (14).....	25
26	May 13, 1908	Apr. 24, 1909	Oct. 24, 1911	.....	.....	Thraasher (26).....	26
27	May 13, 1908	Apr. 21, 1909	Aug. 21, 1911	.....	.....	Tuna (27).....	27
28	Apr. 27, 1904	Mar. 6, 1905	Sept. 6, 1906	Oct. 12, 1907	{Oct. 18, 1907 Apr. 15, 1910	Viper (10).....	28
29	Mar. 3, 1909	.....	.....	.....	.....	Number 28.....	29
30	Mar. 3, 1909	.....	.....	.....	.....	Number 29.....	30
31	Mar. 3, 1909	.....	.....	.....	.....	Number 30.....	31
32	Mar. 3, 1909	.....	.....	.....	.....	Number 31.....	32
33	June 24, 1910	.....	.....	.....	.....	Number 32.....	33
34	June 24, 1910	.....	.....	.....	.....	Number 33.....	34
35	June 24, 1910	.....	.....	.....	.....	Number 34.....	35
36	June 24, 1910	.....	.....	.....	.....	Number 35.....	36

^a Date of purchase.^c Building under agreement.^d Contract not signed.

IRON AND WOODEN

Name.	Built.			Condition or service June 30, 1910.	Rig.
	When.	Where.	By whom.		
IRON.					
1 Alert.....	1873-1875	Chester, Pa.....	John Roach.....	Navy Yard, Mare Island. ^e	Barkentine. 1
2 Ranger.....	1873-1876	Wilmington, Del.	Harlan & Hollingsworth.	Public Marine School, Boston.	Barkentine. 2
3 Wolverine ^d .	1842-1844	Erie, Pa.....	Stackhouse & Tomlinson, of Pittsburg, Pa.	Special service, Great Lakes.	Schooner... 3
WOODEN.					
1 Adams.....	1874-1876	Boston, Mass.....	United States and Donald Mackay.	Public Marine School, Philadelphia.	Bark..... 1
2 Essex.....	1874-1876	Kittery and Boston.	United States and Donald Mackay.	Naval Militia, Ohio.	Bark..... 2
3 Hartford....	1858	Boston, Mass.....	United States.....	Station ship, Naval Academy.	Bark..... 3
4 Mohican....	1872-1883	Mare Island, Cal..	United States.....	Tender to submarines, Asiatic Torpedo Fleet.	Bark..... 4

WOODEN SAIL

Name.	Built.			Condition or service June 30, 1910.	Rig.
	When.	Where.	By whom.		
1 Alliance.....	1873-76	Norfolk, Va.....	United States...	Station and storeship, Culebra, P. R.	Bark.... 1
2 Constellation..	1797	Baltimore, Md....	United States...	Stationary training ship, Newport.	Ship.... 2
3 Eagle ^a				Navy-yard, Norfolk....	Schooner 3
4 Jamestown....	1845	Norfolk, Va.....	United States...	Transferred to Marine-Hospital Service.	Ship.... 4
5 Portsmouth....	1843	Kittery, Me.....	United States...	Naval Militia, New Jersey.	Ship.... 5

^a Subject to possible change.

^b Furnished by Bureau of Navigation, 1910.

^c Out of commission.

^d Formerly Michigan. Name changed June 17, 1905.

NOTE.—The Pinta was stricken from the navy list January 2, 1908.

The Enterprise was stricken from the navy list August 6, 1909.

STEAM VESSELS.

	Dimensions.			Displacement.	Tonnage. ^a		Indicated horsepower.	Speed.	Batteries.		Bunker capacity.	Complement. ^b			
	Length between perpendiculars.	Breadth.	Mean draft.		Gross.	Net, for Suez Canal.			Main.	Secondary.		Officers.	Men.		
1	<i>Ft. in.</i> 177 4	<i>Ft. in.</i> 32 0	<i>Ft. in.</i> 13 0	<i>Tons.</i> 1,110	<i>Tons.</i> 882	<i>Tons.</i> 713	500	<i>Kts.</i> 10.00			<i>Tons.</i> 197	10	133	1	
2	177 4	32 0	13 0	1,261	882		500	10.00				178	133	2	
3	164 11	27 0	9 0	685	402		365	10.50		6 6-pdr. R. F. 2 1-pdr. R. F. 1 .30-cal. M. 1 .30-cal. A.		115	82	3	
1	187 3	35 0	14 10	1,400	665		800	9.80				141	139	1	
2	185 0	35 0	14 3	1,375			800	10.40		2 6-pdr. S. A. 2 1-pdr. S. A.		155	6	2	
3	226 0	43 10	15 2	2,790	1,855	1,273	2,000	12.00	9 5" R. F.	8 6-pdr. R. F. 4 1-pdr. R. F. 2 .30-cal. A.		262	14	256	3
4	216 0	37 0	16 6	1,900	671		1,000	10.65	6 4" R. F.	4 6-pdr. R. F. 2 1-pdr. A.		168	18	63	4
				10,521 total displacement.											

ING VESSELS.

	Dimensions.			Displacement.	Tonnage. ^a				Batteries.		Officers.	Men.	
	Length between perpendiculars.	Breadth.	Mean draft.		Gross.	Net, for Suez Canal.			Main.	Secondary.			
1	<i>Ft. in.</i> 185 0	<i>Ft. in.</i> 35 0	<i>Ft. in.</i> 14 3	<i>Tons.</i> 1,375						4 6-pdr. R. F.	18	107	1
2	176 0	42 0	20 0	1,970	1,236					6 6-pdr. 4 1-pdr. 2 Colts. 2 3" field.	15	196	2
3	130 0	29 9	8 9	275									3
4	163 6	36 6	16 0	1,150	888								4
5	153 0	38 3	16 6	1,125	846					2 3-pdr. S. A.	15		5
				5,895 total displacement.									

^a On L. W. L.^b Molded.^c Received from Coast and Geodetic Survey July 31, 1903.^d Stricken from the navy list September 10, 1910.

	Name and official number.	Built.		Material.
		Where.	By whom.	
1	Accomac.....	Newport News, Va.....	Newport News Shipbuilding and Dry Dock Co.....	Iron.... 1
2	Active.....	San Francisco, Cal.....	Union Iron Works.....	Steel.... 2
3	Alice.....	Tompkins Cove, N. Y.....	Rodermond & Co.....	Wood... 3
4	Apache.....	Tottenville, N. Y.....	A. C. Brown.....	Wood... 4
5	Chickasaw.....	Camden, N. J.....	J. H. Dialogue.....	Iron... 5
6	Choctaw.....	Philadelphia, Pa.....	Neafie & Levy.....	Iron... 6
7	Fortune.....	Boston, Mass.....	James Tetlow.....	Iron... 7
8	Hercules.....	Camden, N. J.....	J. H. Dialogue & Son.....	Iron... 8
9	Iroquois.....	San Francisco, Cal.....	Union Iron Works.....	Steel... 9
10	Iwana (2).....	Boston, Mass.....	City Point Iron Works.....	Steel... 10
11	Locust.....	Tacoma, Wash.....	.....	Wood... 11
12	Massasoit.....	Philadelphia, Pa.....	Neafie & Levy.....	Steel... 12
13	Modoc.....	Camden, N. J.....	J. H. Dialogue & Son.....	Iron... 13
14	Mohawk.....	Newburgh, N. Y.....	T. S. Marvel & Co.....	Steel... 14
15	Narkeeta (3).....	Boston, Mass.....	City Point Iron Works.....	Steel... 15
16	Navajo <i>f</i>	Philadelphia, Pa.....	Neafie & Levy.....	Steel... 16
17	Osceola.....	Philadelphia, Pa.....	Chas. Hillman.....	Steel... 17
18	Patasco (10) <i>g f</i>	Navy-yard, Portsmouth, N. H.....	United States.....	Steel... 18
19	Patuxent (11) <i>g f</i>	Navy-yard, Norfolk, Va.....	United States.....	Steel... 19
20	Pawnee.....	Tompkins Cove, N. Y.....	Rodermond & Co.....	Wood... 20
21	Pawtucket (7).....	Navy-yard, Mare Island, Cal.....	United States.....	Steel... 21
22	Penacook (6).....	Navy-yard, New York, N. Y.....	United States.....	Steel... 22
23	Pentucket (8).....	Navy-yard, Boston, Mass.....	United States.....	Steel... 23
24	Peoria.....	Philadelphia, Pa.....	Neafie & Levy.....	Steel... 24
25	Piscataqua <i>f</i>	West Bay City, Mich.....	F. W. Wheeler & Co.....	Steel... 25
26	Pontiac.....	Athens, N. Y.....	Peter McGlehan.....	Wood... 26
27	Potomac.....	West Bay City, Mich.....	F. W. Wheeler & Co.....	Steel... 27
28	Powhatan.....	Baltimore, Md.....	Maryland Steel Co.....	Steel... 28
29	Rapido.....	.....	.....	Wood... 29
30	Rocket.....	Wilmington, Del.....	Fusey & Jones Co.....	Steel... 30
31	Samoset (5).....	Navy-yard, Norfolk, Va.....	United States.....	Steel... 31
32	Sebago.....	Camden, N. J.....	J. H. Dialogue & Son.....	Steel... 32
33	Sloux.....	Philadelphia, Pa.....	Neafie & Levy.....	Iron... 33
34	Sotoyomo (9).....	Navy-yard, Mare Island, Cal.....	United States.....	Steel... 34
35	Standish.....	Boston, Mass.....	James Tetlow.....	Iron... 35
36	Tecumseh.....	Camden, N. J.....	J. H. Dialogue & Son.....	Steel... 36
37	Traflic.....	South Brooklyn, N. Y.....	D. McCarty.....	Wood... 37
38	Triton.....	Camden, N. J.....	J. H. Dialogue.....	Steel... 38
39	Unadilla (4).....	Navy-yard, Mare Island, Cal.....	United States.....	Steel... 39
40	Uncas.....	Camden, N. J.....	J. H. Dialogue.....	Steel... 40
41	Vigilant.....	Philadelphia, Pa.....	Wm. Cramp & Son.....	Steel... 41
42	Waban.....	Philadelphia, Pa.....	Wm. Cramp & Son.....	Iron... 42
43	Wahnetta (1).....	Boston, Mass.....	City Point Iron Works.....	Steel... 43
44	Wompatuck.....	Wilmington, Del.....	Harlan & Hollingsworth.....	Steel... 44

^a Between perpendiculars.

^b Molded.

NOTE.—The Nezincot foundered off Cape Ann, Aug. 11, 1909, and has been stricken from the navy list. The Nina has been declared lost from Mar. 15, 1910, by the Department and stricken from the navy list. The Transfer, a steam propelled derrick freight lighter (length 110'; breadth 30'; draft 10'; displacement 700 tons), was taken up on the Navy Register July 19, 1910, as a tug.

WOODEN STEAM TUGS.

Condition or service June 30, 1910.	Rig.	Dimensions.			Displacement.	Name and official number.
		Length.	Breadth.	Mean draft.		
1 Navy-yard, Pensacola.....		<i>e</i> 81 5	<i>b</i> 18 10½	<i>f</i> 8 5	187	Accomac..... 1
2 Navy-yard, Mare Island.....	Light-s i g n a l mast.	<i>e</i> 107 0	22 6	10 0	206	Active..... 2
3 Navy-yard, Norfolk.....	One mast and one derrick.	101 9	25 6	8 0	356	Allice..... 3
4 Iona Island.....	Two masts.....	141 6	29 0	10 0	650	Apache..... 4
5 Newport, R. I.....		77 2	18 0	8 0	<i>d</i> 100	Chickasaw..... 5
6 Navy-yard, Washington.....	One mast.....	91 5	21 0	10 0	<i>d</i> 350	Choctaw..... 6
7 Tender to submarines.....	Schooner.....	<i>e</i> 137 0	<i>b</i> 26 0	9 6	450	Fortune..... 7
8 Navy-yard, Norfolk.....	One mast.....	101 6	20 6	9 0	198	Hercules..... 8
9 Navy-yard, Mare Island.....	Schooner.....	<i>e</i> 152 0	<i>b</i> 26 0	13 6	702	Iroquois..... 9
10 Navy-yard, Boston.....		<i>e</i> 92 6	<i>b</i> 20 11½	8 0	192	Iwana (2)..... 10
11 Naval coal depot, California.....	One pole mast.....	<i>e</i> 80 9	<i>b</i> 16 3			Locust..... 11
12 Naval station, Key West.....	One pole mast.....	<i>e</i> 89 5	19 0	8 6	202	Massasoit..... 12
13 Navy-yard, Philadelphia.....		<i>e</i> 96 9	20 10	9 3	241	Modoc..... 13
14 Navy-yard, Norfolk.....		<i>e</i> 104 0	24 0	11 0	420	Mohawk..... 14
15 Navy-yard, New York.....		<i>e</i> 92 6	<i>b</i> 20 11½	8 0	192	Narkeeta (3)..... 15
16 Navy-yard, Mare Island.....	Two masts.....	<i>e</i> 141 4	<i>b</i> 27 6	14 1	800	Navajo..... 16
17 Naval station, Key West.....	Schooner.....	125 5	26 3	14 0	571	Oseola..... 17
18 Tender, Atlantic Fleet.....	Two pole masts.....	<i>e</i> 148 0	29 0½	12 3	755	Patasco (10)..... 18
19 Tender, Atlantic Fleet.....	Two pole masts.....	<i>e</i> 148 0	29 0½	12 3	755	Patuxent (11)..... 19
20 Navy-yard, New York.....	One mast, one derrick.	112 0	27 3	7 0	275	Pawnee..... 20
21 Navy-yard, Puget Sound.....	Schooner.....	<i>e</i> 92 6	21 1	8 9	225	Pawtucket (7)..... 21
22 Navy-yard, Portsmouth.....		<i>e</i> 92 6	21 1	9 0	230	Penacook (6)..... 22
23 Navy-yard, New York.....	Schooner.....	<i>e</i> 92 6	21 1	9 0	230	Pentucket (8)..... 23
24 Naval station, San Juan P. R.....	Schooner.....	131 0	25 0	10 6	487	Peoria..... 24
25 Naval station, Cavite, P. I.....	Two masts.....	<i>e</i> 149 0	28 7	12 0	854	Piscataqua..... 25
26 Navy-yard, New York.....	One mast, one derrick.	124 4	27 0	9 6	401	Pontiac..... 26
27 Navy-yard, Boston.....	Two pole masts.....	<i>e</i> 138 9	28 6	12 0	785	Potomac..... 27
28 Navy-yard, New York.....		<i>e</i> 101 0	21 0	10 0	194	Powhatan..... 28
29 Naval station, Cavite, P. I.....	One pole mast.....	96 0	16 4	7 6	186	Rapido..... 29
30 Navy-yard, Norfolk.....	Derrick mast.....	<i>e</i> 93 0	28 0	9 0	270	Rocket..... 30
31 Navy-yard, Philadelphia.....		<i>e</i> 92 6	21 0	8 9	225	Samoset (5)..... 31
32 Navy-yard, Charleston.....		99 0	21 0	<i>a</i> 8 0	<i>c</i> 243	Sebago..... 32
33 Navy-yard, Boston.....		<i>e</i> 84 6	19 0	8 0	155	Stoux..... 33
34 Navy-yard, Puget Sound.....	Schooner.....	<i>e</i> 92 6	21 1	9 0	230	Sotoyomo (9)..... 34
35 Naval Academy, Annapolis.....	Schooner.....	<i>e</i> 137 0	26 0	9 6	454	Standish..... 35
36 Navy-yard, Washington.....	Schooner.....	88 6	21 6	9 3	214	Tecumseh..... 36
37 Navy-yard, New York.....	Derrick mast.....	<i>e</i> 106 0	29 4	9 0	280	Traffic..... 37
38 Navy-yard, Washington.....		<i>e</i> 96 9	20 9	9 0	212	Triton..... 38
39 Navy-yard, Mare Island.....	Schooner.....	<i>e</i> 110 0	25 0	9 11	355	Unadilla (4)..... 39
40 Navy-yard, Norfolk.....	Schooner.....	119 3	25 0	12 0	441	Uncas..... 40
41 Training station, San Francisco.....	Schooner.....	<i>e</i> 116 0	21 0	9 0	300	Vigilant..... 41
42 Navy-yard, Pensacola.....		<i>e</i> 85 0	<i>b</i> 17 6½	8 0	150	Waban..... 42
43 Navy-yard, Norfolk.....		<i>e</i> 92 6	<i>b</i> 20 11½	8 0	192	Wahneta (1)..... 43
44 Naval station, Olongapo, P. I.....	Schooner.....	117 6	25 6	12 0	462	Wompatuck..... 44
Total displacement (excepting Locust).....					15,463	

e Over all.*e* On water line.*f* Twin screw.*c* Approximate.*d* Estimated.*f* Has towing machine.*a* Maximum draft.

70809°—NAVY 1910—29

	Name and official number.	Tonnage. ^a		Indicated horse-power.	Speed.	Coal capacity.	Guns.
		Gross.	Net for Suez Canal.				
		Tons.	Tons.				
1	Accomac.....	130		250	10	33	1
2	Active.....	174		600	12	80	2
3	Allice.....	155		250	10	15	3
4	Apache.....	298		550	10	120	4
5	Chickasaw.....	70			10	20	5
6	Choctaw.....	152		188	10	70	6
7	Fortune.....	378		340	10	108	7
8	Hercules.....	142			12	40	8
9	Iroquois.....	400		1,000	13.25	205	9
10	Iwana (2).....	158		300	11.58	35	10
11	Locust.....			225			11
12	Massasoit.....	151				34	12
13	Modoc.....	184			10	40	13
14	Mohawk.....	161		400	12	32	14
15	Narkeeta (3).....	158		300	11.22	35	15
16	Navajo.....						16
17	Osceola.....	352					17
18	Patapsco (10).....			b 1,160	b 13	316	18
19	Patuxent (11).....			b 1,160	b 13	316	19
20	Pawnee.....	151		250	10	16	20
21	Pawtucket (7).....	158		450	12.2	30	21
22	Penacook (6).....	158		450	12	28	22
23	Pentucket (8).....	158		450	12	28	23
24	Peoria.....	335				68	24
						4 3-pdr. 2 37 mm. 1 Colt.	
25	Piscataqua.....	518		2,000	16	236	25
26	Pontiac.....	238		425	10.5	45	26
27	Potomac.....	475		2,000	16	200	27
28	Powhatan.....	156		397	13	57	28
29	Rapido.....				10	14	29
30	Rocket.....			450	8	33	30
31	Samoset (5).....	158		450	12	30	31
32	Sebago.....	130			12	30	32
33	Sioux.....	111		290	10	45	33
34	Sotoyomo (9).....	158		506	11.10	28	34
35	Standish.....	330		340	10	80	35
36	Tecumseh.....	150		500	11	40	36
37	Trafle.....				10		37
38	Triton.....			300	13	45	38
39	Unadilla (4).....	200		500	12	(d)	39
40	Uncas.....	284		750	12	120	40
41	Vigilant.....	177		450	12	75	41
42	Waban.....	85		b 300	13	30	42
43	Wahneta (1).....	158		300	11.58	35	43
44	Wompatuck.....	324		650	13	130	44

^a Subject to possible change.^b Estimated.

WOODEN STEAM TUGS—Concluded.

	Contract price of hull and machinery.	Date of act authorizing building.	Contract signed.	Keel laid.	Launched.	Contract date of completion.	Name and official number.	
1				1891			Accomac.....	1
2				1888			Active.....	2
3				1893			Alice.....	3
4				1889			Apache.....	4
5				1882			Chickasaw.....	5
6				1892			Choctaw.....	6
7	\$128,000			1865		Sept. 20, 1864	Fortune.....	7
8				1888			Heracles.....	8
9				1892			Iroquois.....	9
10	32,438	Mar. 2, 1889	Dec. 20, 1890	Apr. —, 1891	Mar. 12, 1892	Dec. 20, 1891	Iwana (2).....	10
11				1898			Locust.....	11
12				1890			Massasoit.....	12
13				1893			Modoc.....	13
14				1893			Mohawk.....	14
15	32,438	Mar. 2, 1889	Dec. 20, 1890	Apr. —, 1891	Feb. 11, 1892	Dec. 20, 1891	Narkeeta (3).....	15
16				1896			Navajo.....	16
17				1896			Osceola.....	17
18	¢ 175,000	Apr. 27, 1904		May 12, 1907	June 29, 1908		Patapsco (10).....	18
19	¢ 175,000	Apr. 27, 1904		July 25, 1907	May 16, 1908		Patuxent (11).....	19
20				1896			Pawnee.....	20
21	¢ 50,000	Mar. 3, 1897		July 22, 1898	Nov. 17, 1898		Pawtucket (7).....	21
22	¢ 50,000	Mar. 3, 1897		Feb. 8, 1898	Oct. 29, 1898		Penacook (6).....	22
23	¢ 70,000	July 1, 1902		Jan. 29, 1903	July 16, 1903		Pentucket (8).....	23
24							Peoria.....	24
25				1897			Pisentaqua.....	25
26				1891			Pontiac.....	26
27				1897			Potomac.....	27
28				1892			Powhatan.....	28
29	29,000		1899				Rapido.....	29
30							Rocket.....	30
31	¢ 25,000	Mar. 2, 1895		Jan. 13, 1895	Mar. 20, 1897		Sarnoset (5).....	31
32				1893			Sebago.....	32
33				1892			Sioux.....	33
34	¢ 70,000	July 1, 1902		Mar. 2, 1903	Aug. 20, 1903		Sotoyomo (9).....	34
35	84,640			1865		Oct. 20, 1864	Standish.....	35
36				1896			Tecumseh.....	36
37				1891			Traffic.....	37
38				1888			Triton.....	38
39	¢ 80,000	July 20, 1894		Apr. 29, 1895	Sept. 21, 1895		Unadilla (4).....	39
40				1893			Unas.....	40
41				1883			Vigilant.....	41
42				1880			Waban.....	42
43	32,438	Mar. 2, 1889	Dec. 20, 1890	Apr. —, 1891	Mar. 3, 1892	Dec. 20, 1891	Wahnetta (1).....	43
44				1896			Wompatuck.....	44

• Limit of cost.

• 7,885 gallons oil fuel.

WOODEN STEAM VESSELS

Name.	Built.			Condition or service June 30, 1910.	Rig.
	When.	Where.	By whom.		
1 Gopher ^b	1871	New York, N. Y..	Delamater & Stack.	Naval Militia, Minne- sota.	T w o - masted schooner.
2 Ionie c.....	1858	New York, N. Y..	United States...	Transferred to Ma- rine-Hospital Serv- ice.	Bark..... 2
3 Omaha.....	1867-1869	Philadelphia, Pa..	United States...	Transferred to Ma- rine-Hospital Serv- ice.	Bark..... 3
4 Yantic.....	1864	Philadelphia, Pa..	United States...	Naval Militia, Mich- igan.	Bark..... 4

WOODEN SAILING VESSELS

Name.	Built.			Condition or service June 30, 1910.	Rig.
	When.	Where.	By whom.		
1 Constitution..	1797	Boston, Mass....	United States...	Navy-yard, Boston..	Ship..... 1
2 Granite State. ^d	1818	Kittery, Me.....	United States...	Naval Militia, New York.	Housed over.. 2

^a Subject to possible change.

^b Formerly Fern. Name changed Dec. 27, 1905.

UNFIT FOR SEA SERVICE.

	Dimensions.			Displacement.	Tonnage. ^a		Indicated horsepower.	Speed.	Batteries.		Coal capacity at 43 cubic feet per ton.	Complement.	
	Length between perpendiculars.	Breadth.	Mean draft.		Gross.	Net for Suez Canal.			Main.	Secondary.		Officers.	Men.
	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>		<i>Kts.</i>			<i>Tons.</i>		
1	160 0	28 0	11 9	840	542	.....	300	9		{ 1 6-pdr. S. A. 2 3-pdr. S. A. 2 1-pdr. S. A. }	80	.....	1
2	198 10	33 10	15 3	1,575	665	.....	1,202	10.7			128	.....	2
3	250 6	38 0	16 6	2,400	1,083	.....	953	11.3				.....	3
4	180 0	30 0	12 2	900	.....	.....	310	8.3		{ 2 6-pdr. S. A. 2 3-pdr. 2 1-pdr. }	130	.....	4
				5,715 total displacement.									

UNFIT FOR SEA SERVICE.

	Dimensions.			Displacement.	Tonnage.		Batteries.	
	Length between perpendiculars.	Breadth.	Mean draft.		Gross tonnage.	Net tonnage.	Main.	Secondary.
	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>		
1	175 0	45 0	20 0	2,200	.....	.....
2	196 3	53 0	23 6	4,150	.....	.....
				6,350 total displacement.				

^c Formerly Iroquois. Name changed Nov. 30, 1904.^d Formerly New Hampshire. Name changed Nov. 30, 1904.

AUXILIARY

	Name.	Material.	Rig.	Built.			
				When.	Where.	By whom.	
1	Buffalo.....	Steel....	Top sail schooner.	1892	Newport News, Va....	Newport News S. B. & D. D. Co.	1
2	Dixie.....	Steel....	Brig.....	1893	Newport News, Va....	Newport News S. B. & D. D. Co.	2
3	Panther.....	Iron.....	Brig.....	1889	Philadelphia, Pa.....	Wm. Cramp & Sons.....	3
4	Prairie.....	Iron.....	Brig.....	1890	Philadelphia, Pa.....	Wm. Cramp & Sons.....	4
5	Yankee.....	Iron.....	Two-masted schooner.	1892	Newport News, Va....	Newport News S. B. & D. D. Co.	5

	Name.	Type of engine.	Speed.	Indicated horse-power.	Bunker capacity to 6 inches below beams (43 cubic feet to the ton).	
			<i>Knots.</i>		<i>Tons.</i>	
1	Buffalo.....	Single screw vertical triple expansion.....	14.5	.....	1,375	1
2	Dixie.....	Single screw vertical triple expansion.....	14.5	.....	1,075	2
3	Panther.....	Single screw vertical triple expansion.....	13.5	.....	675	3
4	Prairie.....	Single screw vertical triple expansion.....	14.5	.....	1,300	4
5	Yankee.....	Single screw vertical triple expansion.....	14.5	.....	1,175	5

* Fore side of stem to center rudder stock.

† Subject to possible change.

CRUISERS.

	Condition or service June 30, 1910.	Length. ^a	Breadth, extreme.	Mean draft.	Displace- ment.	Tonnage.		Name.
						Gross.	Net for Suez Canal.	
		<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	
1	Special service.....	391 6	48 3	19 5	6,000	4,660		Buffalo..... 1
2	Tender, Atlantic tor- pedo fleet.	391 6	48 3	19 11	6,114	4,597	3,074	Dixie..... 2
3	Repair ship, Atlantic fleet.	312 1	40 8	15 9	3,380	2,830	1,912	Panther.... 3
4	Special service.....	391 6	48 3	20 9	6,620	4,522		Prairie..... 4
5	Aground near New- port, R. I.	391 10	48 4	20 1	6,225	4,659		Yankee..... 5
	Total displacement.....				28,339			

	Batteries.		Complement ^c		Date of first and latest commission.	Name.
	Main.	Secondary.	Officers.	Men.		
1	{ 2 5" R. F.	{ 6 3-pdr. S. A.	29	171	{ July 18, 1898	Buffalo..... 1
	{ 4 4" R. F.	{ 6 1-pdr. R. F.				
2	10 3".....	{ 2 6-pdr. R. F., 2 1-pdr. S. A.	21	203	{ Nov. 17, 1906	Dixie..... 2
		{ 2 Colts.....				
3	.....	2 6-pdr.....	10	127	{ Apr. 22, 1898	Panther.... 3
4	10 3".....	2 6-pdr. R. F., 2 1-pdr. S. A.	18	268	{ Nov. 18, 1907	Prairie..... 4
					{ Apr. 14, 1898	
5	10 3" R. F.	2 3-pdr.....	30	172	{ Sept. 26, 1906	Yankee..... 5
					{ Apr. 14, 1898	
					{ June 15, 1908	

^c Furnished by Bureau of Navigation, 1910.

CONVERTED

	Name.	Material.	Rig.	Built.			
				When.	Where.	By whom.	
1	Aileen.....	Steel.....	Schooner..	1896	Chester, Pa.....	John Roach.....	1
2	Dorothea....	Steel.....	Schooner..	1897	Philadelphia, Pa.....	Wm. Cramp & Sons....	2
3	Eagle.....	Steel.....	One mast.	1890	Wilmington, Del.....	Harlan & Hollingsworth.	3
4	Elfrida.....	Steel.....	Schooner..	1899	Wilmington, Del.....	Harlan & Hollingsworth.	4
5	Gloucester ..	Steel.....	Schooner..	1891	Philadelphia, Pa.....	Neafie & Levy.....	5
6	Hawk.....	Steel.....	One mast.	1891	Paisley, Scotland.....	Fleming & Ferguson....	6
7	Hist.....	Steel.....	Schooner..	1895	Philadelphia, Pa.....	Wm. Cramp & Sons....	7
8	Huntress....	Composite.	Schooner..	1895	Nyack-on-Hudson....	Chas. L. Seabury & Co..	8
9	Mayflower..	Steel.....	Schooner..	1896	Clydebank, Scotland..	J. & G. Thompson.....	9
10	Oneida.....	Steel.....	Schooner..	1896	Bath, Me.....	Bath Iron Works.....	10
11	Restless....	Iron.....	One mast.	1887	Chester, Pa.....	Houston & Woodbridge.	11
12	Scorpion....	Steel.....	Schooner..	1896	South Brooklyn, N. Y.	John N. Robins.....	12
13	Siren ^b	Steel.....	One mast.	1897	Leith, Scotland.....	Hawthorne & Co.....	13
14	Stranger....	Iron.....	Schooner..	1880	Philadelphia, Pa.....	Wm. Cramp & Sons....	14
15	Sylph.....	Steel.....	Schooner..	1898	Chester, Pa.....	John Roach.....	15
16	Sylvia.....	Iron.....	Schooner..	1882	Glasgow, Scotland....	A. Stephen & Sons.....	16
17	Vixen.....	Steel.....	Schooner..	1896	Elizabethport, N. J...	Lewis Nixon.....	17
18	Wasp.....	Steel.....	Schooner..	1898	Philadelphia, Pa.....	Wm. Cramp & Sons....	18
19	Yankton....	Steel.....	Schooner..	1893	Leith, Scotland.....	Ramage & Ferguson....	19

^a On water line.^b The Siren was stricken from the Navy list August 30, 1910.

YACHTS.

Condition or service June 30, 1910.		Length.	Breadth.	Mean draft.	Name.
		<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	
1	Naval Militia, Rhode Island.....	120 0	20 0	8 0	Aileen..... 1
2	Naval Militia, Ohio.....	182 4	23 5	11 5	Dorothea.... 2
3	Navy-yard, Portsmouth.....	155 6	24 0	11 6	Eagle..... 3
4	Naval Militia, North Carolina.....	101 6	18 0½	7 9	Elfrida..... 4
5	Naval Militia, New York.....	• 204 0	27 2	12 0	Gloucester.. 5
6	Naval Militia, New York.....	• 145 0	22 0	11 6	Hawk..... 6
7	Special service.....	174 0	23 0	9 10	Hist..... 7
8	Naval Militia, Missouri.....	• 97 0	16 0	7 3	Huntress.... 8
9	Special service.....	• 273 0	36 0	17 4	Mayflower.. 9
10	Naval Militia, District of Columbia.....	• 110 11	18 6	7 6	Onelda..... 10
11	Torpedo station, Newport.....	• 113 0	16 0	6 6	Restless.... 11
12	Station ship, Constantinople.....	212 9	23 1	11 0	Scorpion.... 12
13	Navy-yard, Norfolk.....	• 123 0	19 2	11 0	Siren..... 13
14	Naval Militia, Louisiana.....	• 164 7	23 7	9 3	Stranger.... 14
15	Special service.....	• 123 8	20 0	7 6	Sylph..... 15
16	Naval Militia, Pennsylvania.....	• 130 0	18 6	10 0	Sylvia..... 16
17	Naval Militia, New Jersey.....	• 182 3	28 0	12 8	Vixen..... 17
18	Naval Militia, New York.....	• 180 0	23 0	12 0	Wasp..... 18
19	Tender, Atlantic Fleet.....	• 185 0	27 6	13 10	Yankton... 19

NOTE.—The Inca was stricken from the Navy List December 10, 1908.

The Frolic was transferred to the War Department May 21, 1909, and stricken from the Navy List August 26, 1909.

The Hornet was stricken from the Navy List March 13, 1910.

	Name.	Displacement.	Tonnage. ^a		Type of engine.	Speed.	
			Gross.	Net for Suez Canal.			
		<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>		<i>Knots.</i>	
1	Aileen.....	192	151	.....	Single screw vertical triple expansion.....	14	1
2	Dorothea.....	594	453	.....	Single screw vertical triple expansion.....	15	2
3	Eagle.....	434	365	.....	Single screw vertical inverted triple expansion.....	15.5	3
4	Elfrida.....	164	123	.....	Single screw triple expansion.....	10.5	4
5	Gloucester.....	786	561	.....	Single screw vertical inverted triple expansion.....	17	5
6	Hawk.....	375	270	.....	Single screw quadruple expansion.....	14.5	6
7	Hist.....	472	312	.....	Single screw vertical compound.....	14.5	7
8	Huntress.....	82	85	.....	Single screw vertical inverted triple expansion.....	14	8
9	Mayflower.....	2,600	1,800	.....	Twin screw triple expansion.....	16.8	9
10	Onelda.....	150	119	.....	Single screw vertical inverted triple expansion.....	12	10
11	Restless.....	158	105	.....	Single screw triple expansion.....	12	11
12	Scorpion.....	775	628	.....	Twin screw vertical inverted triple expansion.....	17.85	12
13	Siren.....	♠315	102	.....	Single screw vertical triple expansion.....	13	13
14	Stranger.....	♠360	247	.....	Single screw compound.....	14	14
15	Sylph.....	152	172	.....	Single screw vertical triple expansion.....	15	15
16	Sylvia.....	♠302	136	.....	Single screw compound.....	9	16
17	Vixen.....	806	546	.....	Single screw vertical triple expansion.....	16	17
18	Wasp.....	630	380	.....	Single screw inverted triple expansion.....	16.5	18
19	Yankton.....	♠975	541	.....	Single screw vertical triple expansion.....	14	19
		10,421 total displacement.					

^a Subject to possible change.^b Furnished by Bureau of Navigation, 1910.

YACHTS—Concluded.

	Indicated horsepower.	Bunker capacity, 43 cubic feet to ton.	Battery.	Complement. ^b		Date of first and latest commission.	Name.	
				Officers.	Men.			
1	500	45	1 3-pdr. S. A., 2 1-pdr.			May 14, 1898	Aileen.....	1
2	1,558	78	2 3-pdr. S. A., 4 1-pdr. S. A.		50	June 1, 1898	Dorothea....	2
3	ε 850	65	2 6-pdr. S. A., 4 1-pdr. S. A.	4	63	Mar. 26, 1898	Eagle.....	3
4	ε 200	23	2 Colts.....					
5	2,000	120	1 3-pdr. S. A., 2 1-pdr. S. A.	9	70	May 20, 1899	Gloucester..	5
6	1,000	70	2 1-pdr. S. A.					
7	ε 500	60	2 Colts.....					
8		17	Battery removed.....	4	46	Apr. 5, 1898	Hawk.....	6
9	4,700	525	2 3-pdr. S. A., 2 1-pdr. S. A.	6	58	May 13, 1898	Hist.....	7
10	350	20	2 3-pdr. S. A., 2 1-pdr. S. A.			Oct. 16, 1907	Huntress....	8
11	ε 500	12	6 6-pdr. S. A.	8	166	July 1, 1898	Mayflower..	9
12	2,800	133	1 3-pdr. S. A., 2 1-pdr. S. A.			July 25, 1905	Onelda.....	10
13		45	2 Colts.....			Apr. 30, 1898	Restless....	11
14	550	47	4 6-pdr. R. F.	7	75	Apr. 11, 1898	Scorpion....	12
15		50	4 Colts.....					
16		60	2 3-pdr. S. A.	5	30	Aug. 1, 1908	Siren.....	13
17	1,250	190	2 1-pdr. S. A.			June 24, 1898	Stranger....	14
18	1,800	79	2 1-pdr. S. A.	3	28	June 30, 1898	Sylph.....	15
19	750	170	1 3-pdr. S. A., 2 1-pdr. S. A.			Aug. 18, 1898	Syvia.....	16
			2 6-pdr. S. A.	5	74	Apr. 11, 1898	Vixen.....	17
			2 1-pdr. S. A., 2 3-pdr. S. A.					
			2 Colts.....	4	32	Apr. 11, 1898	Wasp.....	18
			2 3-pdr. S. A.					
			4 1-pdr. S. A.	8	95	Oct. 2, 1902	Yankton....	19
			4 3" R. F.			May 16, 1898		

ε Nominal horsepower.

d Estimated.

	Name and official number.	Material.	Rtg.	Built.			
				When.	Where.	By whom.	
1	Abarenda...	Steel....	Schooner....	1892	Newcastle, England....	Edwards S. B. Co....	1
2	Ajax.....	Steel....	Schooner....	1890	Glasgow, Scotland.....	D. & W. Henderson & Co.	2
3	Alexander...	Steel....	Schooner....	1894	Stockton-on-Tees, England.	Richardson, Duck & Co.	3
4	Brutus.....	Iron.....	2 pole masts.	1894	South Shields, England.	J. Redhead & Sons....	4
5	Cæsar.....	Steel....	Schooner....	1896	Stockton-on-Tees, England.	Ropner & Son.....	5
6	Cyclops (4) ^b .	Steel....	4 pole masts.	1909	Philadelphia, Pa.....	Wm. Cramp & Sons...	6
7	Hannibal....	Steel....	Schooner....	1893	Sunderland, England...	J. Blumer & Co.....	7
8	Hector (7) ^d ..	Steel....	2 pole masts.	1908-9	Sparrow's Point, Md....	Maryland Steel Co....	8
9	Jupiter (3) ^e..	.....	.....	.....	Navy-yard, Mare Island.	United States.....	9
10	Justin.....	Steel....	Schooner....	1891	Middlesboro - on - Tees, England.	R. Dixon & Co.....	10
11	Lebanon....	Steel....	Schooner....	1894	Philadelphia, Pa.....	Wm. Cramp & Sons...	11
12	Leonidas...	Steel....	Schooner....	1898	Sunderland, England...	S. P. Austin & Son, Limited.	12
13	Marcellus ^g ..	Iron.....	Schooner....	1879	Sunderland, England...	Mounsey & Foster...	13
14	Mars (6) ^d	Steel....	2 pole masts.	1908-9	Sparrow's Point, Md....	Maryland Steel Co....	14
15	Nanshan...	Steel....	2 pole masts.	1896	Grangemouth, Scotland.	Grangemouth Dock-yard Co.	15
16	Neptune (8) ^h	Steel....	4 pole masts.	1909	Sparrow's Point, Md....	Maryland Steel Co....	16
17	Nero.....	Steel....	Schooner....	1895	Sunderland, England...	J. L. Thompson & Son, Limited.	17
18	Pompey....	Steel....	Schooner....	1897	Sunderland, England...	S. P. Austin & Son, Limited.	18
19	P r o m e t h e u s (2). ^f	Steel....	4 pole masts.	1907-9	Navy-yard, Mare Island.	United States.....	19
20	Saturn.....	Iron.....	Schooner....	1890	Wilmington, Del.....	Harlan & Hollingsworth.	20
21	Sterling....	Iron.....	Schooner....	1881	Port Glasgow, Scotland.	Duncan & Co.....	21
22	Vestal (1) ⁱ ..	Steel....	4 pole masts.	1907-9	Navy-yard, New York..	United States.....	22
23	Vulcan (5) ^d ..	Steel....	2 pole masts.	1908-9	Sparrow's Point, Md....	Maryland Steel Co....	23
24	Number 9 ^k..	.....	.....	.....	.....	.....	24
25	Number 10 ^k..	.....	.....	.....	.....	.....	25

^a Out of commission.

^b Date of act authorizing the building, May 13, 1908. Contract price, \$822,500.

^c Molded.

^d Date of act authorizing the purchase, May 13, 1908. Price, \$479,000.

^e Date of act authorizing the building May 13, 1908. Limit of cost, \$1,000,000, act of Congress approved June 24, 1910.

^f Registered length.

LIERS.

	Condition or service June 30, 1910.	Length		Breadth.	Depth of hold.	Mean draft loaded.	Name and official number.
		over all.	between perpendiculars.				
		<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	
1	En route Asiatic station.....	325 6	314 0	42 0½	28 6	22 10	Abarenda..... 1
2	Special service.....	387 6	375 4	46 6	30 0	24 8	Ajax..... 2
3	Naval station, Cavite ^a	343 3	330 0	43 0	29 0	23 0	Alexander..... 3
4	Special service.....	332 6	321 6	41 6	21 9	23 1	Brutus..... 4
5	Special service.....	322 1	310 0	43 11	23 0	19 7	Cæsar..... 5
6	Building, 70% complete.....	542 0	520 0	65 0	36 9	27 8	Cyclops (4)..... 6
7	Special service.....	274 1	263 4	39 3	20 0	17 7	Hannibal..... 7
8	Special service.....	403 0	385 0	53 0	29 6	24 8	Hector (7)..... 8
9	Not yet building.....						Jupiter (3)..... 9
10	Pacific Fleet.....	287 6	277 0	39 0	23 0	19 8	Justin..... 10
11	Range ship, Atlantic Fleet.....	259 6	249 0	37 4½	22 0	17 3	Lebanon..... 11
12	Special service.....	273 11	263 3	39 2½	17 2	17 7	Leonidas..... 12
13	Special service.....	295 3	284 6	35 1	24 2	21 3	Marcellus..... 13
14	Special service.....	403 0	385 0	53 0	29 6	24 8	Mars (6)..... 14
15	Asiatic Fleet.....	300 0	287 0	39 0	24 0	21 3	Nanshan..... 15
16	Building, 35% complete.....	542 0	520 0	65 0	36 9	27 7	Neptune (8)..... 16
17	Navy-yard, New York ^a	320 0	312 0	41 0	20 6	22 0	Nero..... 17
18	Asiatic Fleet.....	245 0	234 0	33 6	15 6	15 10	Pompey..... 18
19	Pacific Fleet.....	465 9	450 0	60 1	34 0	26 0	Prometheus (2)..... 19
20	Pacific Fleet.....	297 1	283 0	40 0	26 2	22 1	Saturn..... 20
21	Navy-yard, Portsmouth ^a	284 0	275 0	37 0	23 6	22 6	Sterling..... 21
22	Special service.....	465 9	450 0	60 1	34 0	26 0	Vestal (1)..... 22
23	Special service.....	403 0	385 0	53 0	29 6	24 8	Vulcan (5)..... 23
24	Contract not awarded.....						Number 9..... 24
25	Contract not awarded.....						Number 10..... 25

^a The Marcellus was sunk in collision with the steamer Rosario di Gregorio, Aug. 9, 1910, and stricken from the navy list Sept. 22, 1910.

^b Date of act authorizing the building, Mar. 3, 1909. Contract price, \$889,600.

^c Date of act authorizing the building, Apr. 27, 1904. Limit of cost, \$1,550,000, act of Congress approved June 29, 1906.

^d Date of act authorizing the building, June 24, 1910. Limit of cost, \$1,000,000.

	Name and official number.	Speed loaded.	Displacement.	Tonnage.			Type of engine.	Indicated horse-power.	Bunker capacity.
				Gross.	Net for Suez Canal.				
		<i>Knots.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>			<i>Tons.</i>	
1	Abarenda.	9	6,705	83,125	.....	Single screw vertical triple expansion.	1,050	813	1
2	Ajax.....	10	9,250	84,534	.....	Single screw vertical triple expansion.	3,000	500	2
3	Alexander	8.75	6,181	83,250	.....	Single screw vertical triple expansion.	1,026	800	3
4	Brutus....	10	6,600	83,077	.....	Single screw vertical triple expansion.	1,200	547	4
5	Cæsar.....	10	5,920	2,883	2,072	Single screw vertical triple expansion.	1,500	761	5
6	Cyclops (4). ^d	14.00	19,360	.....	.....	Twin screw vertical triple expansion.	7,200	2,043	6
7	Hannibal.	9	4,000	81,785	.....	Single screw vertical triple expansion.	1,100	480	7
8	Hector (7)/	12.87	11,230	.....	.....	Twin screw vertical triple expansion.	3,921	818	8
9	Jupiter (3)	.....	19,360	.....	.....	.....	.....	.....	9
10	Justin.....	8.3	.....	82,206	.....	Single screw vertical triple expansion.	.....	167	10
11	Lebanon..	10	3,285	81,400	.....	Single screw vertical triple expansion.	.....	188	11
12	Leonidas..	8.5	4,023	81,801	.....	Single screw triple expansion.....	1,100	200	12
13	Marcellus.	11	4,315	81,960	.....	Single screw vertical compound.....	1,200	225	13
14	Mars (6)A..	12.65	11,230	.....	.....	Twin screw vertical triple expansion.	3,818	818	14
15	Nanshan..	10.5	4,950	82,200	.....	Single screw vertical triple expansion.	1,400	400	15
16	Neptune (8). ^e	14.00	19,375	.....	.....	Twin screw turbines with reduction gear.	7,200	2,000	16
17	Nero.....	9	6,360	2,925	.....	Single screw vertical triple expansion.	1,000	300	17
18	Pompey..	10.5	3,085	81,285	.....	Single screw triple expansion.....	.....	200	18
19	Protheus(2). ^b	16.00	12,585	.....	.....	Twin screw vertical triple expansion.	7,500	1,576	19
20	Saturn....	11	6,220	82,268	.....	Single screw triple expansion.....	1,500	1,386	20
21	Sterling... ^c	11	5,663	82,016	.....	Single screw vertical triple expansion.	926	469	21
22	Vestal (1) ^m	16.00	12,585	.....	.....	Twin screw vertical triple expansion.	7,500	1,648	22
23	Vulcan(5) ⁿ	12.82	11,230	.....	.....	Twin screw vertical triple expansion.	3,736	818	23
24	Number 9.	14.00	19,375	.....	.....	.....	.....	.....	24
25	Number 10	14.00	19,375	.....	.....	.....	.....	.....	25
				232,262	total displacement (excepting Justin).				

^a Furnished by Bureau of Navigation, 1910.

^b Subject to possible change.

^c Merchant crew.

^d Keel laid June 2, 1909; launched May 7, 1910.

^e Estimated.

^f Keel laid Oct. 5, 1908; launched July 3, 1909.

^g Approximate.

^h Keel laid Oct. 5, 1908; launched Apr. 10, 1909.

Concluded.

	Cargo capacity for coal.	Battery.	Complement. ^a		Contract signed.	Contract date of completion.	Date of first and latest commission.	Name and official number.
			Officers.	Men.				
	<i>Tons.</i>							
1	3,400		10	30			May 20, 1898 Feb. 21, 1905	Abarenda..... 1
2	5,000		10	41			May 21, 1898 Apr. 30, 1910	Ajax..... 2
3	4,200		9	30			June 1, 1898 Mar. 14, 1900	Alexander..... 3
4	4,000	1 6-pdr.	10	30			May 27, 1898 Mar. 8, 1902	Brutus..... 4
5	3,156		11	30			May 13, 1898 Nov. 4, 1905	Cesar..... 5
6	10,457		12	82	Feb. 3, 1909	Oct. 3, 1910		Cyclops (4).... 6
7	2,300		8	25			June 7, 1898	Hannibal..... 7
8	{ 7,200 to 8,128 }		11	63	Oct. 28, 1908	Oct. 28, 1909	Oct. 22, 1909	Hector (7).... 8
9								Jupiter (3).... 9
10	2,900		10	25			{ Apr. 27, 1898 Sept. 9, 1907	Justin..... 10
11	1,800		5	51			{ Apr. 16, 1898 June 15, 1910	Lebanon..... 11
12	2,200		10	25			{ May 21, 1898 June 11, 1909	Leonidas..... 12
13	2,400		9	30			{ Aug. 9, 1898 Apr. 2, 1909	Marcellus..... 13
14	{ 7,200 to 8,128 }		11	63	Oct. 28, 1908	Aug. 28, 1909	Aug. 26, 1909	Mars (6)..... 14
15	2,900		9	30			{ Feb. 1, 1907	Nanshan..... 15
16	10,500		12	82	Sept. 23, 1909	June 22, 1911		Neptune (8).... 16
17	3,500		10	30			{ June 8, 1898 Feb. 7, 1907	Nero..... 17
18	1,400		8	25			{ May 26, 1898 July 21, 1906	Pompey..... 18
19	{ 5,600 to 6,410 }	4 3" R. F.	12	80			Jan. 15, 1910	Prometheus(2) 19
20	2,400		9	30			{ Apr. 11, 1898 Dec. 2, 1903	Saturn..... 20
21	2,672		9	30			{ Apr. 16, 1898 Aug. 24, 1906	Sterling..... 21
22	{ 5,600 to 6,134 }		12	80			Oct. 4, 1909	Vestal (1).... 22
23	{ 7,200 to 8,128 }		11	63	Oct. 28, 1908	Sept. 28, 1909	Oct. 2, 1909	Vulcan (5).... 23
24								Number 9..... 24
25								Number 10..... 25

† Keel laid Mar. 23, 1910.

‡ Keel laid Oct. 18, 1907; launched Dec. 5, 1908.

§ Calculated to bottom of beams.

¶ Keel laid Mar. 25, 1907; launched May 19, 1908.

* Keel laid Oct. 5, 1908; launched May 15, 1909.

TRANSPORTS AND

	Name.	Material.	Type.	Rig.	Built.			
					When.	Where.	By whom.	
1	Arethusa....	Steel..	Tank steamer.	Schooner...	1893	Stockton.....	Craig, Taylor & Co.	1
2	Celtic.....	Steel..	Refrigerator ship.	2 pole masts	1891	Belfast, Ireland...	Workman, Clark & Co. (Limited).	2
3	Culgoa.....	Steel..	Supply ship...	Schooner...	1889	Sunderland, England.	J. L. Thompson & Son.	3
4	General Alava. ^a	Steel..	Transport....	Schooner...	1895	Dumbarton, Scotland. ^b	A. McMillan & Son.	4
5	Glacier.....	Steel..	Refrigerator ship.	Schooner...	1891	Sunderland, England.	J. L. Thompson & Son.	5
6	Iris.....	Iron...	Supply and repair ship.	Brigantine.	1885	Newcastle, England.	A. Leslie & Co...	6
7	Rainbow....	Steel..	Station and distilling ship.	Schooner...	1890	Sunderland, England.	James Laing.....	7
8	Supply.....	Iron...	Supply ship...	Schooner...	1873	Philadelphia, Pa..	Wm. Cramp & Sons.	8

	Name.	Displacement.	Tons per inch, normal draft.	Tonnage.		Type of engine and boilers.	Speed.		
				Gross.	Net, for Suez Canal.				
1	Arethusa..	<i>Tons.</i> 6,159		<i>Tons.</i> 4,319		Single screw vertical triple expansion; Scotch.	<i>Knots.</i> 10.0	1	
2	Celtic.....	8,000	30.0	4,738		Single screw vertical triple expansion; Scotch.	10.5	2	
3	Culgoa.....	6,000	28.5	3,612	2,483	Single screw vertical triple expansion; Scotch.	13.5	3	
4	General Alava.	1,115	11.0	470		Single screw triple expansion; cylindrical.....	10.5	4	
5	Glacier....	8,325	32.7	4,154		Single screw triple expansion.....	12.5	5	
6	Iris.....	6,100	23.3	2,723	1,923	Single screw compound vertical; Scotch.....	10.0	6	
7	Rainbow..	4,360	26.5	3,455	2,254	Single screw vertical triple expansion; Scotch.	12.0	7	
8	Supply....	4,325	25.0	3,422	2,692	Single screw triple expansion; Scotch.....	9.66	8	
		44,384 total displacement.							

^a Originally purchased by War Department.^b Engined by David Rowen & Son, of Glasgow.

SUPPLY SHIPS.

	Condition or service June 30, 1910.	Length over all.	Length between perpendiculars.	Breadth.	Mean draft.	Name.	
		<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>		
1	Navy-yard, Norfolk.....	343 6	332 0	42 2	20 11	Arethusa....	1
2	Supply ship, Atlantic Fleet.....	383 1	371 4	44 7	24 1	Celtic.....	2
3	Supply ship, Atlantic Fleet.....	346 4	334 4	43 0	21 9	Culgoa.....	3
4	Naval station, Cavite.....		212 6	29 9	11 0	General Alava. Glacier.....	4
5	Supply ship, Pacific Fleet.....	388 7	353 0	46 1	25 4	Glacier.....	5
6	Tender, Pacific Torpedo Fleet.....	321 0	310 6	39 0	24 0	Iris.....	6
7	Asiatic Fleet.....	351 10	326 0	41 0	17 2	Rainbow....	7
8	Station ship, Guam.....	355 8	342 7	43 4	19 5	Supply.....	8

	Indicated horse-power.	Bunker capacity.	Battery.	Complement. c		Date of first and latest commission.	Name.	
				Officers.	Men.			
		<i>Tons.</i>						
1	.....	685	.....	5	78	{ Oct. 15, 1909	Arethusa..	1
2	1,690	739	2 6-pdr.....	9	138	{ May 25, 1898 Oct. 23, 1908	Celtic.....	2
3	2,350	957	2 1-pdr.....	9	113	{ Dec. 3, 1898 Sept. 12, 1907	Culgoa.....	3
4	770	240	.....	8	88	{ Mar. 9, 1900 June 11, 1904	General Alava. }	4
5	1,750	917	1 3-pdr.....	8	110	{ July 5, 1898 Sept. 15, 1905	Glacier....	5
6	1,320	300	.....	8	116	{ Apr. 1, 1898 Oct. 15, 1909	Iris.....	6
7	1,800	1,139	{ 6 6-pdr. R. F..... 6 1-pdr. R. F..... 2.30-cal. A.....	3	289	{ July 18, 1898 Dec. 1, 1901	Rainbow..	7
8	1,069	1,029	{ 6 6-pdr. R. F..... 4 1-pdr. R. F..... 2.30-cal. A.....	10	132	{ Aug. 1, 1902	Supply...	8

c Furnished by Bureau of Navigation, 1910.

d Subject to possible change.

e Estimated.

HOSPITAL

	Name.	Material.	Rig.	Built.			
				When.	Where.	By whom.	
1	Relief <i>a</i>	Steel.....	2 pole masts.	1896	Chester, Pa.....	Delaware River Co.....	1
2	Solace.....	Steel.....	Schooner....	1896	Newport News, Va..	Newport News S. B. Co..	2

	Name.	Displacement.	Tonnage. ^b		Type of engines and boilers.	Speed.
			Gross.	Net, for Suez Canal.		
1	Relief.....	Tons. 3,300	Tons. 3,094		Single screw vertical triple expansion; cylindrical. Single screw vertical triple expansion; Scotch.	Knots. 15.0
2	Solace.....	5,700	3,801			
		9,000 total displacement.				

RECEIVING

	Name and official number.	Built.			Material.	Rig.	Condition or service June 30, 1910.	
		When.	Where.	By whom.				
1	Franklin <i>e</i>	1855-1865	Kittery, Me...	United States...	Wood.	Housed over.	Navy-yard, Norfolk.	1
2	Hancock <i>f</i>	1879	Glasgow, Scotland.	.....	Iron...	Schooner	Navy-yard, New York.	2
3	Independence. ^g	1837	Boston, Mass..	United States...	Wood.	Housed over.	Navy-yard, Mare Island.	3
4	Lancaster.....	1858	{Philadelphia, Pa.	} United States...	Wood.	Shlp....	} Navy-yard, Philadelphia.	} 4
5	Pensacola <i>e</i>	1858-1862	Pensacola, Fla.		United States...	Wood.			{Deck house and drill masts.	{Training station, San Francisco.	5
6	Philadelphia (4)	1857-1890	Philadelphia, Pa.	Wm. Cramp & Sons.	Steel..	Housed over.	Navy-yard, Puget Sound.	6
7	Reina Mercedes	1887	Cartagena.....	.....	Iron...	Housed over.	Auxiliary to the Constellation.	7
8	Richmond <i>e</i>	1858	Norfolk, Va...	United States...	Wood.	Housed over.	Auxiliary to the Franklin.	8
9	Wabash <i>e</i>	1854	Philadelphia, Pa.	United States...	Wood.	Housed over.	Navy-yard, Boston.	9

^a Transferred from the army Nov. 13, 1902.^b Subject to possible change.^e Furnished by Bureau of Navigation, 1910.^g Merchant crew.

SHIPS.

	Condition or service June 30, 1910.	Length over all.	Length between perpendiculars.	Breadth.	Mean draft.	Name.	
1	Floating hospital, Naval Station, Olongapo, P. I.	<i>Ft. in.</i> 314 0	<i>Ft. in.</i> 299 2	<i>Ft. in.</i> 46 0	<i>Ft. in.</i> 15 10	Relief.....	1
2	Atlantic Fleet.....	377 0	361 2	44 0	22 0	Solace.....	2

	Indicated horse-power.	Bunker capacity.	Battery	Complement, c		Date of first and latest commission.	Name.	
				Officers.	Men.			
1		<i>Tons.</i> 607	.....	16	481	{ Feb. 6, 1908 Apr. 14, 1898 Nov. 20, 1909	Relief.....	1
2	3,200	1,000	.....	17	488		Solace.....	2

SHIPS.

	Length between perpendiculars.		Mean draft.	Displacement.	I. H. P.	Speed.	Bunker capacity.	Complement, c		Batteries.		Name and official number.		
	<i>Ft. in.</i>	<i>Ft. in.</i>						Officers.	Men.	Main.	Secondary.			
1	<i>Ft. in.</i> 265 9	<i>Ft. in.</i> 54 3	<i>Ft. in.</i> 24 3	<i>Tons.</i> 5,170	1,050	<i>Knots.</i> 9.00		214		2 3-pdr. R. F.		Franklin.....	1	
2	450	245 4	24 3	8,500			2,428	188				Hancock.....	2	
3	189	651 6	21 6	3,270				129		1 12-pdr. 2 6-pdr. R. F. 1 3-pdr. S. A. 1 3" F. 1 Colt.....		Independence.....	3	
4	285	846 0	19 2	3,250	1,000	9.60	326	221	10 5" R. F.	6 6-pdr. 2 1-pdr. 4 6-pdr. R. F. 1 3-pdr. R. F.		Lancaster....	4	
5	230	844 6	18 7	3,000			285	105	14" R. F.	5 1-pdr. 1 Colt..... 1 3" F.		Pensacola....	5	
6	327	648 7	19 6	4,410	8,688	19.68	525	187				Philadelphia (4).	6	
7	292	643 3	16 9	2,835			194	91				Reina Mercedes.	7	
8	225	642 6	17 4	2,700	692	9.50	265					Richmond....	8	
9	262	751 4	23 0	4,650	950	9.15		182				Wabash.....	9	
				37,785 total displacement.										

* Unfit for sea service.

/ Transferred from the army Nov. 8, 1902.

Approximate.

PRISON

	Name.	Built.			Material.	Rig.	Condition or service June 30, 1910.	
		When.	Where.	By whom.				
1	Manila ^b	1881	Leth, Scotland.	.....	Iron...	Schooner.	Navy-yard, Mare Island.	1
2	Nipsic ^c	1873-1879	Washington, D. C.	United States....	Wood.	Housed over.	Navy-yard, Puget Sound.	2
3	Southery...	1889	Sunderland, England.	R. Thompson Sons & Co.	Steel..	Housed over.	Navy-yard, Portsmouth, N. H.	3
4	Topeka....	1881	Kiel, Germany	G. Howidt.....	Iron...	Schooner.	Auxiliary to Southery.	4

VESSELS ASSIGNED TO

	Name.	Type.	Built.			
			When.	Where.	By whom.	
1	Amphitrite...	Double-turret monitor.	1874-1895	Wilmington, Del., and Norfolk, Va.	Harlan & Hollingsworth and United States.	1
2	Cheyenne....	Single-turret monitor.	1898-1902	San Francisco, Cal	Union Iron Works.....	2
3	Ozark.....	do.....	1898-1902	Newport News, Va....	Newport News S. B. Co....	3
4	Topopah....	do.....	1898-1903	Bath, Me.....	Bath Iron Works.....	4
5	Chicago....	Protected cruiser	1883-1889	Chester, Pa.....	John Roach & Sons.....	5
6	Marblehead..	Unprotected cruiser.	1889-1894	Boston, Mass.....	City Point Works.....	6
7	Don Juan de Austria.	Gunboat.....	1887	Cartagena, Spain.....	.....	7
8	Isla de Cuba..	do.....	1886	Newcastle on Tyne, England.	W. G. Armstrong.....	8
9	Isla de Luzon.	do.....	1887	do.....	do.....	9
10	Machias....	do.....	1890-1893	Bath, Me.....	Bath Iron Works.....	10
11	Nashville....	do.....	1894-1897	Newport News, Va....	Newport News S. B. Co....	11
12	Alvarado....	do.....	.....	Clydebank, Scotland..	Clydebank Engineering and Shipbuilding Co.	12
13	Sandoval....	do.....	.....	do.....	do.....	13
14	Dupont.....	Torpedo boat..	1895-1897	Bristol, R. I.....	Herreshoff Mfg. Co.....	14
15	Foote.....	do.....	1895-1897	Baltimore, Md.....	Columbian Iron Works....	15
16	Rodgers....	do.....	1895-1898	do.....	do.....	16
17	Somers.....	do.....	.....	Elbing, Germany.....	Schichau Works.....	17
18	Aileen.....	Converted yacht	1896	Chester, Pa.....	John Roach.....	18
19	Dorothea....	do.....	1897	Philadelphia, Pa.....	Wm. Cramp & Sons.....	19
20	Elfrida....	do.....	1899	Wilmington, Del.....	Harlan & Hollingsworth..	20
21	Gloucester..	do.....	1891	Philadelphia, Pa.....	Neafie & Levy.....	21
22	Hawk.....	do.....	1891	Paisley, Scotland.....	Fleming & Ferguson.....	22
23	Huntress....	do.....	1895	Nyack-on-Hudson.....	Chas. L. Seabury & Co....	23
24	Oneida....	do.....	1896	Bath, Me.....	Bath Iron Works.....	24
25	Stranger....	do.....	1880	Philadelphia, Pa.....	Wm. Cramp & Sons.....	25
26	Sylvia....	do.....	1882	Glasgow, Scotland.....	A. Stephen & Sons.....	26
27	Vixen.....	do.....	1896	Elizabethport, N. J....	Lewis Nixon.....	27
28	Wasp.....	do.....	1898	Philadelphia, Pa.....	Wm. Cramp & Sons.....	28
29	Essex.....	Steam vessel...	1874-1876	Kittery and Boston....	United States and Donald Mackay.	29
30	Gopher.....	do.....	1871	New York, N. Y.....	Delamater & Stack.....	30
31	Yantic.....	do.....	1864	Philadelphia, Pa.....	United States.....	31
32	Granite State.	Sailing vessel...	1818	Kittery, Me.....	do.....	32
33	Portsmouth..	do.....	1843	do.....	do.....	33

^a Furnished by Bureau of Navigation, 1910.

^b Captured during war with Spain on May 1, 1898.

SHIPS.

	Length between perpendiculars.		Breadth.	Mean draft.	Displacement.	I. H. P.	Speed.	Bunker capacity.	Complement. ^a		Batteries.		Name.
	<i>Ft. in.</i>	<i>Ft. in.</i>							Officers.	Men.	Main.	Secondary.	
1	209 3	31 2	13 0	1,750	750	10	186	10	92			Manilla.....	1
2	184 9	35 0	11 10	1,100			60		47			Nipsle.....	2
3	288 0	38 10				9	380	6	161			Southery...	3
4	251 0	35 0	17 8	2,265	2,000	16	394		77			Topeka.....	4
5,105 total displacement (excepting Southery).													

NAVAL MILITIAS.^d

	Material.	Rig.	Length.		Breadth.	Mean draft.		Displacement.	Name.
			<i>Ft. in.</i>	<i>Ft. in.</i>		<i>Ft. in.</i>	<i>Tons.</i>		
1	Steel.....	1 military mast.....	259 3	55 4	14 6	3,990	Amphitrite.....	1	
2	Steel.....	do.....	252 0	50 0	12 6	3,225	Cheyenne.....	2	
3	Steel.....	do.....	252 0	50 0	12 6	3,225	Ozark.....	3	
4	Steel.....	do.....	252 0	50 0	12 6	3,225	Tonopah.....	4	
5	Steel.....	2-masted schooner.....	325 0	48 2½	19 0	4,500	Chicago.....	5	
6	Steel.....	do.....	257 0	37 0	14 6	2,072	Marblehead.....	6	
7	Iron.....	do.....	210 0	32 0	12 0	1,130	Don Juan de Austria.....	7	
8	Steel.....	do.....	192 10	30 1½	11 6	1,030	Isla de Cuba.....	8	
9	Steel.....	do.....	192 10	30 1½	11 6	1,030	Isla de Luzon.....	9	
10	Steel.....	do.....	204 0	32 1½	12 0	1,177	Machias.....	10	
11	Steel.....	do.....	220 0	38 1½	11 0	1,371	Nashville.....	11	
12	Steel.....	do.....	110 0	15 6	5 4	100	Alvarado.....	12	
13	Steel.....	do.....	110 0	15 6	5 4	100	Sandoval.....	13	
14	Steel.....	1 signal pole.....	175 0	17 8½	4 8	165	Dupont.....	14	
15	Steel.....	do.....	160 0	16 1	5 0	142	Foote.....	15	
16	Steel.....	do.....	160 0	16 1	5 0	142	Rodgers.....	16	
17	Steel.....	do.....	149 4	17 6	5 10	150	Somers.....	17	
18	Steel.....	Schooner.....	120 0	20 0	8 0	192	Alleen.....	18	
19	Steel.....	do.....	182 4	23 5	11 5	594	Dorothea.....	19	
20	Steel.....	do.....	101 6	18 0½	7 9	164	Elfrida.....	20	
21	Steel.....	do.....	204 0	27 2	12 0	786	Gloucester.....	21	
22	Steel.....	1 mast.....	145 0	22 0	11 6	375	Hawk.....	22	
23	Composite.....	Schooner.....	97 0	16 0	7 3	82	Huntress.....	23	
24	Steel.....	do.....	110 11	18 6	7 6	150	Onelda.....	24	
25	Iron.....	do.....	164 7	23 7	9 3	369	Stranger.....	25	
26	Iron.....	do.....	130 0	18 6	10 0	302	Sylvia.....	26	
27	Steel.....	do.....	182 3	28 0	12 8	806	Vixen.....	27	
28	Steel.....	do.....	180 0	23 0	12 0	630	Wasp.....	28	
29	Wood.....	Bark.....	185 0	35 0	14 3	1,375	Essex.....	29	
30	Wood.....	2-masted schooner.....	160 0	28 0	11 9	840	Gopher.....	30	
31	Wood.....	Bark.....	180 0	30 0	12 2	900	Yantic.....	31	
32	Wood.....	Housed over.....	196 3	53 0	25 6	4,150	Granite State.....	32	
33	Wood.....	Ship.....	153 0	38 3	16 6	1,125	Portsmouth.....	33	

^c Unfit for sea service^d Special table. Vessels grouped according to type in foregoing tables.

VESSELS ASSIGNED TO

	Name.	Type of engines and boilers.	Speed.	Indicated horse-power.	Bunker capacity, 43 cubic feet to ton.	
			Knots.		Tons.	
1	Amphitrite.....	Twin screw inclined compound. Babcock & Wilcox.	10.50	1,600	271	1
2	Cheyenne.....	Twin screw vertical triple expansion. Babcock & Wilcox.	11.80	2,359	129	2
3	Ozark.....	Twin screw vertical triple expansion. Thornycroft.	12.03	1,739	344	3
4	Tonopah.....	Twin screw vertical triple expansion. Nielauss...	13.04	1,970	338	4
5	Chicago.....	Twin screw horizontal triple expansion. Scotch; Babcock & Wilcox.	18.00	9,000	850	5
6	Marblehead.....	Twin screw vertical triple expansion. Scotch.....	18.44	4,987	346	6
7	Don Juan de Austria.	Single screw horizontal compound. Gunboat.....	12.20	941	204	7
8	Isla de Cuba.....	Twin screw horizontal triple expansion. Cylindrical.	13.08	844	159	8
9	Isla de Luzon.....	Twin screw horizontal triple expansion. Cylindrical.	11.23	516	159	9
10	Machias.....	Twin screw vertical triple expansion. Gunboat....	15.46	1,848	261	10
11	Nashville.....	Twin screw vertical quadruple expansion. Mosher.	16.30	2,524	363	11
12	Alvarado.....	Single screw vertical compound. Scotch.....			16	12
13	Sandoval.....	Single screw vertical compound. Scotch.....			16	13
14	Dupont.....	Twin screw vertical triple expansion. Normand...	28.58		76	14
15	Foote.....	Twin screw vertical triple expansion. Mosher.....	24.53	2,000	44	15
16	Rodgers.....	Twin screw vertical triple expansion. Mosher.....	24.49	2,295	44	16
17	Somers.....	Single screw vertical quadruple expansion. Locomotive.	17.50	1,900	37	17
18	Aleen.....	Single screw vertical triple expansion.....	14.00	500	45	18
19	Dorothea.....	Single screw vertical triple expansion.....	15.00	1,558	78	19
20	Elfrida.....	Single screw triple expansion.....	10.50	200	23	20
21	Gloucester.....	Single screw vertical triple expansion.....	17.00	2,000	120	21
22	Hawk.....	Single screw quadruple expansion.....	14.50	1,000	70	22
23	Huntress.....	Single screw vertical triple expansion.....	14.00		17	23
24	Onelda.....	Single screw vertical triple expansion.....	12.00	350	20	24
25	Stranger.....	Single screw compound.....	14.00		50	25
26	Sylvia.....	Single screw compound.....	9.00		60	26
27	Vixen.....	Single screw vertical triple expansion.....	16.00	1,250	190	27
28	Wasp.....	Single screw vertical triple expansion.....	16.50	1,800	79	28
29	Essex.....		10.40	800	155	29
30	Gopher.....		9.00	300	80	30
31	Yantic.....		8.30	310	130	31
32	Granite State.....					32
33	Portsmouth.....					33

^a And 60,516 gallons of oil fuel.

NAVAL MILITIAS—Concluded.

	Batteries.		Where assigned.	When assigned.	Name.	
	Main.	Secondary.				
1	410' B. L. R., 2 4" R. F.	2 6-pdr. R. F., 2 3-pdr. R. F., 2 1-pdr. R. F., 1 .30 cal. A.	Missouri.....	June 1, 1910	Amphitrite.....	1
2	212' B. L. R., 4 4" R. F.	3 6-pdr. S. A., 4 1-pdr. A., 2 .30 cal. A.	Washington.....	June 10, 1910	Cheyenne.....	2
3	212' B. L. R., 4 4" R. F.	3 6-pdr. S. A., 6 1-pdr. A., 2 .30 cal. A.	District of Co- lumbia.....	June 10, 1910	Ozark.....	3
4	212' B. L. R., 4 4" R. F.	3 6-pdr. S. A., 6 1-pdr. A., 2 .30 cal. A.	New Jersey.....	June 15, 1910	Tonopah.....	4
5	48' B. L. R., 14 5" R. F.	9 6-pdr. R. F., 2 1-pdr. R. F., 13" F., 2 .30 cal. A.	Massachusetts....	June 16, 1910	Chlongo.....	5
6	10 5" R. F.....	6 6-pdr. R. F., 2 1-pdr. R. F., 13" F., 2 .30 cal. A.	California.....	Dec. 17, 1909	Marblehead.....	6
7	6 3" R. F.....	4 6-pdr. R. F., 2 1-pdr. R. F., 2 .30 cal. A.	Michigan.....	July 3, 1907	Don Juan de Aus- tria.....	7
8	6 3" R. F.....	4 6-pdr. R. F., 4 .30 cal. A.	Maryland.....	Mar. 21, 1907	Isla de Cuba.....	8
9	4 4" R. F.....	4 6-pdr. R. F., 4 .30 cal. A.	Louisiana.....	Dec. 6, 1907	Isla de Luzon....	9
10	8 4" R. F.....	4 6-pdr. R. F., 2 1-pdr. R. F., 2 .30 cal. A.	Connecticut.....	Dec. 6, 1907	Machias.....	10
11	8 4" R. F.....	4 6-pdr. R. F., 2 1-pdr. R. F., 2 .30 cal. A.	Illinois.....	Dec. 6, 1907	Nashville.....	11
12	.....	2 3-pdr. R. F., 2 1-pdr. S. A., 2 Colts.	Louisiana.....	.....	Alvarado.....	12
13	.....	2 3-pdr. R. F., 2 1-pdr. S. A.	New York.....	Dec. 7, 1906	Sandoval.....	13
14	3 torpedo tubes	4 1-pdr. R. F.....	North Carolina...	May 19, 1910	Dupont.....	14
15	2 torpedo tubes	3 1-pdr. R. F.....	Massachusetts....	Apr. 20, 1910	Foote.....	15
16	2 torpedo tubes	3 1-pdr. R. F.....	do.....	May 14, 1910	Rodgers.....	16
17	3 torpedo tubes	4 1-pdr. R. F.....	Maryland.....	Feb. 24, 1909	Somers.....	17
18	.....	1 3-pdr. S. A., 2 1-pdr..	Rhode Island.....	June 15, 1910	Allen.....	18
19	.....	2 3-pdr. S. A., 4 1-pdr. S. A.	Ohio.....	July 14, 1909	Dorothea.....	19
20	.....	1 3-pdr. S. A., 2 1-pdr. S. A.	North Carolina...	July 26, 1909	Elfrida.....	20
21	.....	6 3-pdr. S. A., 2 1-pdr. S. A., 2 Colts.	New York.....	Feb. 24, 1909	Gloucester.....	21
22	.....	.....	New York.....	Aug. 28, 1909	Hawk.....	22
23	.....	2 3-pdr. S. A., 2 1-pdr. S. A.	Missouri.....	July 17, 1907	Huntress.....	23
24	.....	1 3-pdr. S. A., 2 1-pdr. S. A.	District of Co- lumbia.....	.....	Oneida.....	24
25	.....	2 3-pdr. S. A., 2 1-pdr. S. A.	Louisiana.....	Nov. 16, 1898	Stranger.....	25
26	.....	1 3-pdr. S. A., 2 1-pdr. S. A.	Pennsylvania....	Dec. 6, 1907	Sylvia.....	26
27	.....	2 6-pdr. S. A., 2 3-pdr. S. A., 2 1-pdr. S. A., 2 Colts.	New Jersey.....	Dec. 6, 1907	Vixen.....	27
28	.....	2 3-pdr. S. A., 4 1-pdr. S. A.	New York.....	Feb. 6, 1908	Wasp.....	28
29	.....	2 6-pdr. S. A., 2 1-pdr. S. A.	Ohio.....	May 9, 1904	Essex.....	29
30	.....	1 6-pdr. S. A., 2 3-pdr. S. A., 2 1-pdr. S. A.	Minnesota.....	May 25, 1905	Gopher.....	30
31	.....	2 6-pdr. S. A., 2 3-pdr., 2 1-pdr.	Michigan.....	July 2, 1897	Yantic.....	31
32	.....	.....	New York.....	.....	Granite State....	32
33	.....	2 3-pdr. S. A.....	New Jersey.....	May 6, 1895	Portsmouth.....	33

COAL BARGES.

Registered No.	Length.	Breadth.	Present location.	Where and when built or purchased.	Remarks.
	<i>Ft. in.</i>	<i>Ft. in.</i>			
1.....	215 3	33 2	Norfolk, Va.	Baltimore, Md., purchased 1898.	Steel.
6.....	105 0	25 0	San Juan, P. R.	Milton, Fla., purchased 1898.	Wood, sheathed.
7 ^a	103 0	33 4	Key West, Fla.	Port Tampa, Fla., purchased 1898.	Do.
9.....	103 0	25 3	.....do.....	Received from War Dept., 1898.	Do.
10.....	102 4	25 4	.....do.....	Port Tampa, Fla., purchased 1898.	Do.
15.....	75 0	37 6	Honolulu, Hawaii.	Honolulu, Hawaii, 1898.	Do.
18.....	75 0	25 0	Puget Sound, Wash.	Navy-yard, Puget Sound, 1900.	Do.
19.....	75 0	25 0	.....do.....	.....do.....	Do.
23.....	105 0	31 6	Guantanamo, Cuba.	Navy-yard, Pensacola, Fla., 1901.	Wood, sheathed, with house.
24 ^b	105 0	31 6	.....do.....	.....do.....	Do.
25.....	69 0	18 6	Cavite, P. I.	El Varadero de Manila, Cavite, P. I., 1901.	Steel, with wood house.
27.....	69 0	18 6	.....do.....	.....do.....	Do.
29.....	69 0	18 6	.....do.....	.....do.....	Do.
30 ^c	69 0	18 6	.....do.....	.....do.....	Do.
31.....	48 0	16 0	Polloc, P. I.	.....do.....	Do.
32.....	48 0	16 0	Cavite, P. I.	.....do.....	Do.
33.....	110 0	28 0	Mare Island, Cal.	Navy-yard, Mare Island, 1900.	Steel.
34.....	85 6	22 3	Cavite, P. I.	El Varadero de Manila, Cavite, P. I., 1902.	Steel, with wood house.
37.....	69 0	18 6	.....do.....	.....do.....	Do.
38.....	90 0	28 0	Puget Sound, Wash.	Olympia, Wash., 1902.	Wood, sheathed.
39.....	90 0	28 0	.....do.....	.....do.....	Do.
40.....	90 0	28 0	.....do.....	.....do.....	Do.
41.....	90 0	28 0	.....do.....	.....do.....	Do.
49.....	86 2	29 2	Frenchmans Bay.	Bangor, Me., 1902.	Wood, sheathed, with house.
50.....	86 2	29 2	.....do.....	.....do.....	Do.
51.....	86 2	29 2	.....do.....	.....do.....	Do.
52.....	86 2	29 2	.....do.....	.....do.....	Do.
53.....	86 2	29 2	New London, Conn.	Navy-yard, New York, 1902.	Do.
54.....	86 2	29 2	.....do.....	.....do.....	Do.
55.....	86 2	29 2	Guantanamo, Cuba.	Navy-yard, Pensacola, Fla., 1902.	Do.
56.....	86 2	29 2	.....do.....	.....do.....	Do.
57 ^a	86 2	29 2	Culebra Island.	.....do.....	Do.
58.....	86 2	29 2	San Juan, P. R.	.....do.....	Wood, sheathed, with flash-boards.
59.....	86 2	29 2	Culebra Island.	.....do.....	Wood, sheathed, with house.
60.....	86 2	29 2	.....do.....	.....do.....	Do.
62.....	86 2	29 2	.....do.....	Navy-yard, Norfolk, Va., 1902.	Do.
64.....	86 2	29 2	San Juan, P. R.	.....do.....	Wood, sheathed, with flash-boards.
65.....	86 2	29 2	Guantanamo, Cuba.	.....do.....	Wood, sheathed, with house.
66.....	86 2	29 2	.....do.....	.....do.....	Do.
67.....	86 2	29 2	Norfolk, Va.	.....do.....	Do.
69.....	108 0	23 4	.....do.....	.....do.....	Steel.
70.....	86 2	29 2	Mare Island, Cal.	Navy-yard, Mare Island, Cal., 1902.	Wood, sheathed.
71.....	86 2	29 2	.....do.....	.....do.....	Do.
72.....	86 2	29 2	.....do.....	.....do.....	Do.
73.....	86 2	29 2	.....do.....	.....do.....	Wood, sheathed, with house.
74.....	108 0	23 4	Norfolk, Va.	Navy-yard, Norfolk, Va., 1902.	Steel, with wood house.
76.....	48 0	15 9	Cavite, P. I.	San Nicolas Iron Works, Manila, P. I., 1903.	Do.
77.....	48 0	15 9	.....do.....	.....do.....	Do.
78.....	48 0	15 9	.....do.....	.....do.....	Do.
79.....	108 0	23 4	Portsmouth, N. H.	Navy-yard, Portsmouth, N. H., 1903.	Steel.
80.....	108 0	23 4	.....do.....	.....do.....	Do.
81.....	108 0	23 4	New York	Navy-yard, New York, 1903.	Do.
82.....	108 0	23 4	.....do.....	.....do.....	Do.
83.....	86 2	29 2	Philadelphia, Pa.	Navy-yard, Philadelphia, Pa., 1903.	Wood, sheathed.
84.....	86 2	29 2	.....do.....	.....do.....	Do.
85.....	86 2	29 2	Pensacola, Fla.	Navy-yard, Pensacola, Fla., 1903.	Do.
86.....	86 2	29 2	.....do.....	.....do.....	Do.
87.....	86 2	29 2	.....do.....	.....do.....	Do.
88.....	108 0	23 4	Narragansett Bay.	Navy-yard, Portsmouth, N. H., 1903.	Steel.
89.....	108 0	23 4	.....do.....	.....do.....	Do.

^a Fitted with sheer legs and hoisting engine.

^b Fitted for coal handling.

^c Turned over to Marine Corps.

COAL BARGES—Continued.

Registered No.	Length.	Breadth.	Present location.	Where and when built or purchased.	Remarks.
90....	Fl. in. 86 2	Fl. in. 29 2	Narragansett Bay....	Navy-yard, Boston, Mass., 1903.	Wood, sheathed, with flash-boards.
91....	86 2	29 2	do.....	do.....	Do.
92....	86 2	29 2	do.....	do.....	Do.
93....	86 2	29 2	do.....	do.....	Do.
94....	86 2	29 2	do.....	do.....	Do.
95....	86 2	29 2	do.....	do.....	Do.
96....	86 2	29 2	do.....	do.....	Do.
97....	86 2	29 2	do.....	do.....	Wood, sheathed, with house. Wood, sheathed, with flash-boards.
98....	86 2	29 2	do.....	do.....	Do.
99....	86 2	29 2	do.....	do.....	Do.
100....	86 2	29 2	Boston, Mass.....	do.....	Do.
101....	86 2	29 2	do.....	do.....	Do.
102....	86 2	29 2	do.....	do.....	Do.
103....	86 2	29 2	do.....	do.....	Do.
104....	86 2	29 2	do.....	do.....	Do.
105....	86 2	29 2	do.....	do.....	Do.
106....	86 2	29 2	Pensacola, Fla.....	Navy-yard, Pensacola, Fla., 1903.	Do.
107....	86 2	29 2	do.....	do.....	Do.
108....	86 2	29 2	do.....	do.....	Do.
109....	86 2	29 2	do.....	do.....	Do.
110....	32 8	12 6	Island of Guam.....	do.....	Wood.
111....	86 2	29 2	Guantanamo, Cuba.....	Navy-yard, Pensacola, Fla., 1904.	Wood, sheathed.
112....	86 2	29 2	do.....	do.....	Do.
113....	86 2	29 2	do.....	do.....	Do.
114....	86 2	29 2	Key West, Fla.....	do.....	Do.
116....	48 0	20 0	Island of Guam.....	Navy-yard, Mare Island, Cal., 1905.	Do.
117....	45 0	20 0	do.....	do.....	Do.
118....	110 0	30 0	Norfolk, Va.....	Navy-yard, Norfolk, Va., 1905.	Do.
119....	110 0	30 0	do.....	do.....	Do.
120....	110 0	30 0	do.....	do.....	Do.
121....	110 0	30 0	do.....	do.....	Do.
122....	86 2	29 2	Guantanamo, Cuba.....	Navy-yard, Pensacola, Fla., 1904.	Do.
123....	86 2	29 2	do.....	do.....	Do.
124....	86 2	29 2	Norfolk, Va.....	Navy-yard, Norfolk, Va., 1905.	Do.
125....	110 0	30 0	do.....	do.....	Do.
126....	110 0	30 0	Pensacola, Fla.....	Navy-yard, Pensacola, Fla., 1905.	Wood, sheathed, with flash-boards.
127....	110 0	30 0	Narragansett Bay....	Navy-yard, New York, 1905.	Do.
128....	110 0	30 0	do.....	do.....	Do.
129....	110 0	30 0	California City Point, Cal.	Navy-yard, Mare Island, Cal., 1907.	Do.
130....	110 0	30 0	do.....	do.....	Do.
131....	110 0	30 0	do.....	do.....	Do.
132....	110 0	30 0	do.....	do.....	Do.
135....	110 0	30 0	Norfolk, Va.....	Navy-yard, Norfolk, Va., 1907.	Do.
136....	110 0	30 0	do.....	do.....	Do.
137....	110 0	30 0	do.....	do.....	Do.
138....	69 0	20 0	Island of Guam.....	Navy-yard, Mare Island, 1907.	Do.
140....	60 0	20 0	Pichllinque Bay.....	do.....	Do.
141....	60 0	20 0	do.....	do.....	Do.
142....	60 0	20 0	do.....	do.....	Do.
143....	69 0	20 0	do.....	do.....	Do.
144....	110 0	30 0	Cavite, P. I.....	Naval station, Cavite, P. I., 1908.	Do.
145....	110 0	30 0	do.....	do.....	Do.
146....	110 0	30 0	do.....	do.....	Do.
147....	110 0	30 0	do.....	do.....	Do.
148....	110 0	30 0	Pensacola, Fla.....	Navy-yard, Pensacola, Fla., 1908.	Do.
149....	110 0	30 0	Key West, Fla.....	do.....	Do.
150....	110 0	30 0	do.....	do.....	Do.
151....	110 0	30 0	Norfolk, Va.....	Navy-yard, Norfolk, Va., 1908.	Do.
152....	110 0	30 0	California City Point, Cal.	Navy-yard, Mare Island, Cal., 1908.	Do.
153....	110 0	30 0	do.....	do.....	Do.
154....	110 0	30 0	do.....	do.....	Do.
155....	110 0	30 0	do.....	do.....	Do.
156....	110 0	30 0	Puget Sound.....	Navy-yard, Puget Sound, 1907.	Do.
157....	110 0	30 0	do.....	do.....	Do.
158....	110 0	30 0	do.....	do.....	Do.
159....	110 0	30 0	do.....	do.....	Do.
160....	110 0	30 0	Narragansett Bay....	Navy-yard, New York, 1907.	Do.
161....	110 0	30 0	do.....	do.....	Do.
162....	110 0	30 0	Navy-yard, Philadelphia, Pa.	Navy-yard, Philadelphia, Pa., 1903.	Do.

• Fitted for coal handling.

• Fitted as house boat for surveying.

COAL BARGES—Continued.

Registered No.	Length.	Breadth.	Present location.	Where and when built or purchased.	Remarks.
163....	Fl. in. 110 0	Fl. in. 30 0	Navy-yard, Philadelphia, Pa.	Navy-yard, Philadelphia, Pa. 1908.	Wood, sheathed, with flash-boards.
164....	110 0	30 0	California City Point, Cal.	Navy-yard, Mare Island, Cal., 1908.	Do.
165....	110 0	30 0	do.	do.	Do.
166....	110 0	30 0	do.	do.	Do.
167....	110 0	30 0	do.	do.	Do.
168....	110 0	30 0	Narragansett Bay.	Navy-yard, New York, 1908.	Do.
169....	110 0	30 0	Navy-yard, New York.	do.	Do.
170....	110 0	30 0	Puget Sound.	Navy-yard, Puget Sound, 1908.	Do.
171....	110 0	30 0	do.	do.	Do.
172....	110 0	30 0	do.	do.	Do.
173....	110 0	30 0	do.	do.	Do.
174....	110 0	30 0	Naval station, Cavite, P. I.	Navy-yard, New York, 1908.	Do.
175....	110 0	30 0	do.	do.	Do.
176....	110 0	30 0	do.	do.	Do.
177....	110 0	30 0	do.	do.	Do.
178....	110 0	30 0	do.	do.	Do.
179....	110 0	30 0	do.	do.	Do.
180....	110 0	30 0	do.	do.	Do.
181....	110 0	30 0	do.	do.	Do.
182....	110 0	30 0	do.	do.	Do.
183....	110 0	30 0	do.	do.	Do.
184....	110 0	30 0	do.	do.	Do.
185....	110 0	30 0	do.	do.	Do.
186....	110 0	30 0	California City Point, Cal.	Navy-yard, Mare Island, Cal., 1908.	Do.
187....	110 0	30 0	do.	do.	Do.
188....	110 0	30 0	do.	do.	Do.
189....	110 0	30 0	do.	do.	Do.
190....	110 0	30 0	Puget Sound.	Navy-yard, Puget Sound, 1908.	Do.
191....	110 0	30 0	do.	do.	Do.
192....	110 0	30 0	do.	do.	Do.
193....	110 0	30 0	do.	do.	Do.
194....	110 0	30 0	Key West, Fla.	Navy-yard, Pensacola, Fla., 1908.	Do.
195....	110 0	30 0	do.	do.	Do.
196....	110 0	30 0	do.	do.	Do.
197....	110 0	30 0	Navy-yard, Pensacola, Fla.	do.	Do.
198....	110 0	30 0	Navy-yard, Philadelphia, Pa.	Navy-yard, Philadelphia, Pa., 1908.	Do.
199....	110 0	30 0	do.	do.	Do.
200....	110 0	30 0	do.	do.	Do.
201....	110 0	30 0	do.	do.	Do.
202....	110 0	30 0	do.	do.	Do.
203....	110 0	30 0	do.	do.	Do.
204....	110 0	30 0	do.	do.	Do.
205....	110 0	30 0	do.	do.	Do.
206....	110 0	30 0	Building, navy-yard, Philadelphia, Pa.	do.	Do.
207....	110 0	30 0	do.	do.	Do.
208....	110 0	30 0	Navy-yard, Norfolk, Va.	Navy-yard, Norfolk, Va., 1908.	Do.
209....	110 0	30 0	do.	do.	Do.
210....	110 0	30 0	do.	do.	Do.
211....	110 0	30 0	do.	do.	Do.
212....	110 0	30 0	do.	do.	Do.
213....	110 0	30 0	do.	do.	Do.
214....	110 0	30 0	do.	do.	Do.
215....	110 0	30 0	San Diego, Cal.	Navy-yard, Mare Island, Cal., 1908.	Do.
216....	110 0	30 0	do.	do.	Do.
217....	110 0	30 0	do.	do.	Do.
218....	110 0	30 0	Navy-yard, Mare Island, Cal.	do.	Do.
219....	110 0	30 0	do.	do.	Do.
220....	110 0	30 0	do.	do.	Do.
221....	110 0	30 0	do.	do.	Do.
222....	110 0	30 0	do.	do.	Do.
223....	110 0	30 0	do.	do.	Do.
224....	110 0	30 0	do.	do.	Do.
225....	110 0	30 0	do.	do.	Do.
226....	110 0	30 0	do.	do.	Do.
227....	60 0	20 0	Narragansett Bay.	Navy-yard, Boston, Mass., 1908.	Do.
228....	60 0	20 0	do.	do.	Do.
229....	60 0	20 0	Navy-yard, Boston, Mass.	do.	Do.

* Temporarily loaned to Quartermaster's Department of Army at Manila.

COAL BARGES—Continued.

Registered No.	Length.	Breadth.	Present location.	Where and when built or purchased.	Remarks.
231...	<i>Ft. in.</i> 110 0	<i>Ft. in.</i> 30 0	Building, navy-yard, Mare Island, Cal.	Navy-yard, Mare Island, Cal., 1909.	Wood, sheathed, with flash-boards. Do.
232...	110 0	30 0	Building, navy-yard, Pensacola, Fla.	Navy-yard, Pensacola, Fla., 1909.	Do.
233...	110 0	30 0	.....do.....	.....do.....	Do.
234...	110 0	30 0	Building, navy-yard, Mare Island, Cal.	Navy-yard, Mare Island, Cal., 1909.	Do.
235...	110 0	30 0	.....do.....	.....do.....	Do.
236...	110 0	30 0	.....do.....	.....do.....	Do.
237...	110 0	30 0	.....do.....	.....do.....	Do.
238...	110 0	30 0	Naval station, Cavite, P. I.	Naval station, Cavite, P. I., 1910.	Do.
239...	110 0	30 0	Building, navy-yard, Mare Island, Cal.	Navy-yard, Mare Island, Cal., 1910.	Do.
240...	110 0	30 0	.....do.....	.....do.....	Do.
241...	110 0	30 0	.....do.....	.....do.....	Do.
242...	110 0	30 0	.....do.....	.....do.....	Do.
243...	110 0	30 0	.....do.....	.....do.....	Do.
244...	110 0	30 0	.....do.....	.....do.....	Do.
245...	110 0	30 0	.....do.....	.....do.....	Do.
246...	110 0	30 0	.....do.....	.....do.....	Do.
247...	110 0	30 0	.....do.....	.....do.....	Do.
248...	110 0	30 0	.....do.....	.....do.....	Do.
249...	110 0	30 0	Building, navy-yard, Portsmouth, N. H.	Navy-yard, Portsmouth, N. H., 1910.	Do.
250...	110 0	30 0	.....do.....	.....do.....	Do.

ASH LIGHTERS.

Registered No.	Length.	Breadth.	Present location.	Where and when built or purchased.	Remarks.
1.....	<i>Ft. in.</i> 26 10	<i>Ft. in.</i> 14 1	Key West, Fla.....	Key West, Fla., purchased 1898..	Wood, sheathed.
2.....	23 9	10 0	.....do.....	.....do.....	Do.
3.....	24 0	10 4	.....do.....	.....do.....	Do.
4.....	30 10	12 9	Boston, Mass.....	Boston, Mass., purchased 1899..	Steel.
6.....	35 5	10 5	San Juan, P. R.....	San Juan, P. R., purchased 1901..	Wood, sheathed.
8.....	33 9	8 5	Naval Academy, Annapolis, Md.	Unknown.....	Do.
9.....	47 2	20 2	Pensacola, Fla.....	Pensacola, Fla., 1899.....	Do.
10.....	37 2	15 9	Guantanamo, Cuba...	Purchased from Brooks & Co., 1904.	Do.
11.....	110 0	37 0	Pensacola, Fla.....	Navy-yard, Pensacola, Fla., 1908.	Do.
12.....	118 0	32 0	Guantanamo, Cuba...	The Snare and Triest Co., New York, N. Y., 1905.	Do.
13.....	50 0	20 0	Narragansett Bay....	Navy-yard, Boston, Mass., 1905..	Do.
14.....	50 0	20 0	Boston, Mass.....	.....do.....	Do.
16.....	50 0	20 0	Naval Academy, Annapolis, Md.	Navy-yard, Norfolk, Va., 1906..	Do.
19.....	50 0	20 0	Pensacola, Fla.....	Navy-yard, Pensacola, Fla., 1908.	Do.
20.....	50 0	20 0	Olongapo, P. I.....	Naval station, Cavite, P. I., 1908.	Do.
21.....	60 0	20 0	Cavite, P. I.....	.....do.....	Do.
22.....	36 0	15 0	Naval Academy, Annapolis, Md.	Navy-yard, Norfolk, 1908.....	Do.
23.....	50 0	15 0	Mare Island, Cal.....	Navy-yard, Mare Island, Cal., 1908.	Wood.
24.....	50 0	15 0	.....do.....	.....do.....	Do.
25.....	40 0	20 0	Guantanamo, Cuba...	Naval station, Guantanamo, Cuba, 1909.	Wood, sheathed.
26.....	40 0	20 0	.....do.....	.....do.....	Do.
27.....	40 0	20 0	.....do.....	.....do.....	Do.
28.....	40 0	20 0	.....do.....	.....do.....	Do.
29.....	50 0	20 0	Charleston, S. C.....	Navy-yard, Charleston, S. C., 1910.	Do.
30.....	46 6	14 0	Mare Island, Cal.....	.....do.....	Wood.
31.....	50 0	15 0	.....do.....	Navy-yard, Mare Island, Cal., 1910.	Do.
32.....	50 0	15 0	.....do.....	.....do.....	Do.
33.....	36 0	15 0	Norfolk, Va.....	Navy-yard, Norfolk, Va., 1910..	Wood, sheathed.
34.....	24 0	10 0	Puget Sound, Wash...	Navy-yard, Puget Sound, 1904..	Wood.
35.....	24 0	10 0	.....do.....	.....do.....	Do.
36.....	24 0	10 0	.....do.....	.....do.....	Do.
37.....	60 0	20 0	Cavite, P. I.....	Naval station, Cavite, P. I., 1910.	Wood, sheathed.

WATER BARGES.

Registered No.	Length.	Breadth.	Present location.	Where and when built or purchased.	Remarks.
	<i>Ft. in.</i>	<i>Ft. in.</i>			
2.....	170 0	33 0	Culebra.....	New York, N. Y., purchased 1908.	Steel.
4.....	144 0	23 0	Norfolk, Va.....	Elizabethport, N. J., 1898.....	Do.
5.....	144 0	23 0	Boston, Mass.....	do.....	Do.
6.....	40 0	16 0	U. S. Naval Training Station, Newport, R. I.	Navy-yard, New York, N. Y., 1898.	Wood.
9.....	82 0	22 2½	Port Royal, S. C.....	Port Royal, S. C., 1898.....	Steel.
10.....	142 3	22 6	Puget Sound, Wash...	Navy-yard, Puget Sound, Wash., 1905.	Do.
11.....	92 0	17 0	Narragansett Bay.....	Navy-yard, New York, N. Y., 1904.	Do.
12.....	120 0	23 6	Norfolk, Va.....	Navy-yard, Norfolk, Va., 1904...	Do.
13.....	92 0	17 0	Pensacola, Fla.....	Navy-yard, Pensacola, Fla., 1904.	Do.
14.....	80 0	30 0	Guantanamo, Cuba...	Pusey & Jones, Wilmington, Del., 1905.	Do.
15.....	92 0	17 0	Naval station, Hawaii.	Navy-yard, Mare Island, Cal., 1905.	Do.
16.....	120 0	23 6	Mare Island, Cal.....	do.....	Steel, self-propelled.
17.....	154 0	22 8	New York, N. Y.....	Navy-yard, Portsmouth, N. H., 1908.	Do.
18.....	92 0	30 0	Guantanamo, Cuba...	Navy-yard, New York, N. Y., 1907.	Do.
19.....	92 0	30 0	Naval station, Cavite, P. I.	Naval station, Cavite, P. I., 1907.	Do.
20.....	92 0	30 0	New York, N. Y.....	Navy-yard, New York, N. Y., 1907.	Do.
21.....	50 0	25 0	Naval Academy, Annapolis, Md.	Navy-yard, Norfolk, Va., 1899...	Steel, 5-ton derrick.
22.....	92 0	30 0	Building, navy-yard, New York, N. Y.	Navy-yard, New York, N. Y., 1910.	Steel, self-propelled.
	70 0	17 8	Olongapo, P. I.....	Naval station, Olongapo, P. I., 1906.	Steel, sheathed.

AMMUNITION LIGHTERS.

Official number or name.	Length.	Breadth.	Present location.	Where and when built or purchased.	Remarks.
	<i>Ft. in.</i>	<i>Ft. in.</i>			
1.....	61 0	21 0	Mare Island, Cal.....	Navy-yard, Mare Island, Cal., 1899.	Steel.
2.....	61 0	21 0	do.....	do.....	Do.
3.....	61 0	21 0	Puget Sound, Wash...	Navy-yard, Puget Sound, Wash., 1901.	Do.
4.....	61 0	21 0	do.....	do.....	Do.
6.....	100 7½	30 ½	Washington, D. C.....	Navy-yard, Norfolk, Va., 1902...	Steel.
7.....	90 0	25 4	Cavite, P. I.....	Cavite, P. I., 1902.....	Steel, with mast and steam hoisting gear.
8.....	110 0	28 6	do.....	Naval station, Cavite, P. I., 1907...	Steel, self-propelled.
9.....	100 7½	30 ½	Washington, D. C.....	Navy-yard, Norfolk, Va., 1904...	Steel.
10.....	86 2	29 2	Philadelphia, Pa.....	Navy-yard, Philadelphia, Pa., 1904.	Wood, with deck house.
11.....	122 0	30 0	New York, N. Y.....	Navy-yard, New York, N. Y., 1905.	Steel, with mast and steam hoisting gear.
T o r p e d o .	106 7½	30 ½	Washington, D. C.....	Navy-yard, Norfolk, Va. 1907...	Steel.
12.....	128 0½	31 0½	do.....	Fore River Shipbuilding Co., Quincy, Mass., 1909.	Do.
14.....	100 6	30 0	do.....	Ash Lighter No. 18, converted. Navy-yard, Norfolk, Va., 1909.	Do.
15.....	90 0	28 0	Building, navy-yard, Puget Sound, Wash.	Navy-yard, Puget Sound, Wash., 1910.	Wood, sheathed.
16.....	90 0	28 0	do.....	do.....	Do.
17.....	80 0	21 0	Building, navy-yard, Boston, Mass.	Navy-yard, Boston, Mass., 1910.	Do.
Grape-shot.	86 2	29 2	New York, N. Y.....	Navy-yard, New York, N. Y., 1901.	Wood, covered steam hoisting apparatus.
Shrapnel.	86 2	29 2	do.....	do.....	Do.
Canister.	86 2	29 2	do.....	Navy-yard, New York, N. Y., 1903.	Do.

MISCELLANEOUS LIGHTERS, DERRICKS, BARGES, ETC.

Number or name.	Kind.	Length.	Breadth.	Present location.	Where and when built or purchased.	Remarks.
		<i>Ft. in.</i>	<i>Ft. in.</i>			
No. 1.....	Tugboat...	62 0	9 3½	Newport, R. I.	Navy-yard, New York, N. Y., 1896.	Used for class instruction.
No. 2.....	do.....	62 0	9 3½	do.....	do.....	Do.
Alda.....	do.....	76 0	18 0	Bradford, R. I.	Pusey and Jones Co., Wilmington, Del., 1905.	Steel.
Banaag.....	do.....	96 0	16 0	Building, Hongkong, China.	Hongkong Whompoa Dock Co., Hongkong, China, 1910.	Composite, copper sheathed.
Wicomico.....	do.....	79 0	14 0	Naval station, New Orleans.	Purchased from Christie & Lowe, New Orleans, La., 1905.	Wood, with deck house.
Steam cutter No. 457.	do.....	50 0	10 0	Frenchmans Bay.	Navy-yard, Portsmouth, N. H., 1904.	Steel.
No. 681.....	Working launch.	65 0	13 0	Naval station, Cavite, P. I.	Naval station, Cavite, P. I., 1908.	Wood, sheathed; steam, self-propelled.
No. 682.....	do.....	65 0	13 0	do.....	do.....	Do.
No. 683.....	do.....	65 0	13 0	do.....	do.....	Do.
No. 684.....	do.....	65 0	13 0	do.....	do.....	Do.
No. 685, Rivera.	do.....	65 0	13 0	Naval station, Olongapo, P. I.	do.....	Do.
No. 686.....	do.....	65 0	13 0	Naval station, Cavite, P. I.	do.....	Do.
No. 687, Magdala.	do.....	65 0	13 0	Naval station, Olongapo, P. I.	do.....	Do.
Ferry No. 2.	Ferryboat ..	55 4	13 6	Navy-yard, New York.	Navy-yard, New York, 1893.	Steel.
Ferry No. 3.	do.....	55 4	13 7½	do.....	Navy-yard, New York, 1905.	Steel, with chain propulsion.
Ferry No. 4.	do.....	55 4	13 7½	do.....	Navy-yard, New York, 1910.	Do.
Wave.....	Ferryboat...	80 0	24 0	Naval Torpedo Station, Newport, R. I.	Herreshoff Mfg. Co., 1907.	Steel.
Billow.....	Ferry launch	60 0	14 0	do.....	do.....	Composite.
Breaker.....	do.....	50 0	10 0	Second Naval District, Newport, R. I.	Navy-yard, Portsmouth, N. H., 1901.	Wood.
Castro.....	do.....	75 4	18 3½	Naval Training Station, Yerba Buena.	Navy-yard, Mare Island, 1904.	Steel.
Courier.....	do.....	56 8	13 0	Naval station, Port Royal, S. C.	Navy-yard, Norfolk, Va., 1897.	Wood.
Daisy.....	do.....	64 6	14 9	Navy-yard, Norfolk, Va.	Navy-yard, Norfolk, Va., 1885.	Wood, sheathed.
Dart.....	do.....	71 10	16 7	Navy-yard, Mare Island.	Navy-yard, Mare Island, 1900.	Steel.
Despatch.....	do.....	66 6	13 6	Naval Training Station, Newport, R. I.	Navy-yard, Portsmouth, N. H., 1902.	Wood.
Indian.....	do.....	60 9	11 0	Naval proving grounds.	Navy-yard, Norfolk, Va., 1906.	Do.
Kite.....	do.....	77 0	20 0	Navy-yard, Charleston, S. C.	Navy-yard, Portsmouth, N. H., 1906.	Composite.
Navy-yard.....	do.....	80 0	17 0½	Navy-yard, Norfolk, Va.	Navy-yard, Norfolk, Va., 1901.	Do.
Pinafore.....	do.....	45 0	12 3	Navy-yard, Mare Island.	Navy-yard, Mare Island, 1902.	Wood, sheathed.
Resolute.....	do.....	66 6	13 6	Naval Training Station, Newport, R. I.	Navy-yard, Portsmouth, N. H., 1888.	Do.
Steam cutter No. 132.	do.....	64 0	16 0	Navy-yard, Portsmouth, N. H.	Navy-yard, Portsmouth, N. H., 1890.	Do.
Vilette.....	Commandant's launch.	56 0	9 4	Navy-yard, New York.	Cowes, Isle of Wight, England.	Wood.
Lewie.....	Fire boat...	75 0	18 0	Navy-yard, Mare Island.	Navy-yard, Mare Island, Cal., 1902.	Wood, sheathed.
Robert Center.	Sloop.....	68 0	12 4½	Naval Academy, Annapolis, Md.	Unknown.....	Wood.
Argo.....	Yawl.....	57 0	16 3	do.....	Essex, Mass., 1892...	Do.

MISCELLANEOUS LIGHTERS, DERRICKS, BARGES, ETC.—Continued.

Number or Name.	Kind.	Length.	Breadth.	Present location.	Where and when built or purchased.	Remarks.
		<i>Ft. in.</i>	<i>Ft. in.</i>			
Nahma.....	Gasoline launch.	72 0	12 0	Louisiana Naval Militia.	New Orleans, La., 1902.	Wood.
Wanka.....	Lighter.....	48 0	9 6	.....do.....	Unknown.....	Do.
.....do.....	.....do.....	50 0	30 0	Naval Academy, Annapolis, Md.	Navy-yard, Norfolk, Va., 1903.	Wood, sheathed.
.....do.....	.....do.....	50 0	30 0	.....do.....	.....do.....	Do.
.....do.....	.....do.....	86 2	29 2	Naval Training Station, Newport, R. I.	Navy-yard, New York, N. Y., 1904.	Wood, with deck house.
.....do.....	.....do.....	49 2	20 0	Island of Guam.	Naval station, Island of Guam, 1910.	Wood, sheathed.
No. 21.....	.....do.....	90 0	30 4	Navy-yard, Pensacola, Fla., Supplies and Accounts.	Navy-yard, Pensacola, Fla., 1901.	Wood, with deck house.
No. 68.....	.....do.....	86 2	29 4	Navy-yard, Norfolk, Va., Supplies and Accounts.	Navy-yard, Norfolk, Va., 1902.	Do.
Defence.....	.....do.....	83 0	30 6	Navy-yard, New York, Supplies and Accounts.	Purchased, Perth Amboy, N. J., 1898.	Wood, covered.
Supply.....	.....do.....	80 0	28 0	.....do.....	Navy-yard, New York, 1898.	Steel.
Transport.....	.....do.....	96 0	32 0	.....do.....	Navy-yard, New York, 1901.	Wood.
.....do.....	Lighter.....	32 0	10 0	Navy-yard, Mare Island.	Navy-yard, Mare Island, 1898.	Do.
.....do.....	.....do.....	50 0	20 0	San Diego, Cal.	Navy-yard, Mare Island, 1900.	Wood, sheathed.
.....do.....	Cargo lighter.	40 0	20 0	Guantanamo, Cuba.	Naval station, Guantanamo, Cuba, 1903.	Do.
.....do.....	.....do.....	40 0	20 0	.....do.....	.....do.....	Do.
No. 1.....	.....do.....	60 0	19 0	Navy-yard, Puget Sound.	Navy-yard, Puget Sound, 1908.	Wood, sheathed.
No. 2.....	.....do.....	60 0	19 0	.....do.....	.....do.....	Do.
Float "A".....	.....do.....	60 0	20 0	Naval station, Cavite, P. I., Supplies and Accounts.	Naval station, Cavite, P. I., 1907.	Do.
Float "D".....	.....do.....	60 0	20 0	.....do.....	.....do.....	Do.
Float "E".....	.....do.....	60 0	20 0	.....do.....	Naval station, Cavite, P. I., 1908.	Do.
.....do.....	.....do.....	110 0	30 0	.....do.....	Naval station, Cavite, P. I., 1910.	Wood, copper sheathed, steam derrick, 10 tons.
.....do.....	Freight lighter.	50 0	10 0	Naval station, New Orleans.	Naval station, New Orleans, 1900.	Wood.
Transfer.....	.....do.....	50 0	15 0	Navy-yard, Mare Island.	Navy-yard, Mare Island, 1908.	Do.
.....do.....	Sampson lighter.	60 2	15 0	.....do.....	Navy-yard, Mare Island, 1910.	Wood, sheathed.
.....do.....	.....do.....	60 2	15 0	.....do.....	.....do.....	Do.
No. 3.....	Ordnance barge.	90 0	31 6	Navy-yard, Washington, D. C.	New York, N. Y., 1900.	Steel.
.....do.....	Mud barge..	60 0	24 6	Navy-yard, Mare Island.	.....do.....	Wood.
No. 4.....	.....do.....	100 0	30 0	.....do.....	Navy-yard, Mare Island, 1909.	Do.
No. 5.....	.....do.....	100 0	30 0	.....do.....	.....do.....	Do.
.....do.....	Pitchlighter.	30 0	10 0	Navy-yard, Puget Sound.	Navy-yard, Puget Sound.	Wood, with house.
No. 3.....	Powder hoy.	54 6	17 6	Navy-yard, Norfolk.	.....do.....	Steel.
.....do.....	Torpedo barge.	55 0	26 0	Naval Academy.	Navy-yard, Norfolk, Va., 1903.	Wood, sheathed.
Advance.....	Torpedo launching barge.	48 0	15 9	Naval station, Olongapo, P. I.	Manila, 1903.	Steel.
Scow A.....	Scow.....	40 6	20 3	Navy-yard, Philadelphia, Pa.	Navy-yard, Philadelphia, Pa., 1902.	Wood, with deck house.
No. 1.....	Coal scow...	80 0	25 0	Charleston, S. C.	Naval station, Port Royal, 1898.	Wood, sheathed.

MISCELLANEOUS LIGHTERS, DERRICKS, BARGES, ETC.—Continued.

Number or name.	Kind.	Length. <i>Ft. in.</i>	Breadth. <i>Ft. in.</i>	Present location.	Where and when built or purchased.	Remarks.
No. 2.....	Coal scow...	80 0	25 0	Charleston, S. C.	Naval station, Port Royal, 1898.	Wood, sheathed.
	Dump scow.	76 0	24 0	Navy-yard, Pensacola.	1905.....	Do.
	.....do.....	76 0	24 0	.....do.....	.....do.....	Do.
	Dumping scow No. 1.	110 0	29 0	Navy-yard, New York, N. Y.	Unknown, 1899.....	Wood.
	Dumping scow No. 2.	110 0	29 0	.....do.....	Navy-yard, New York, N. Y., 1903.	Do.
No. 1.....	Garbage lighter.	110 0	29 8	Boston, Mass....	Navy-yard, Boston, Mass., 1905.	Wood, self-dumping.
No. 1.....	.....do.....	62 0	20 8	Navy-yard, Puget Sound.	Navy-yard, Puget Sound, 1909.	Do.
No. 2.....	.....do.....	62 0	20 8	.....do.....	.....do.....	Do.
No. 2.....	Anchor hoy.	81 0	30 0	Navy-yard, New York, N. Y.	Navy-yard, New York, N. Y., 1904.	Wood, with deck house over hoisting machinery.
	Revolving pontoon, 75 tons.	66 6	60 8	Navy-yard, New York, N. Y.	Pontoon built by Wm. Cramp & Sons, Philadelphia, Pa., 1886.	Steel.
Dewey.....	Scow.....	57 5	22 1	Navy-yard, Boston.	Navy-yard, Boston, 1892.	Wood, 5-ton derrick scow.
Victor.....	Ordnance lighter.	95 6	33 0	Navy-yard, New York, N. Y.	Purchased from Merritt & Chapman Wrecking Co., New York, 1898.	Wood, steam derrick, 20 tons.
Ajax.....	Steam derrick scow.	75 0	25 0	Navy-yard, Puget Sound.	Navy-yard, Puget Sound, 1900.	Wood.
No. 75.....	Floating crane.	62 1½	36 0	Navy-yard, Philadelphia, Pa.	Navy-yard, Philadelphia, Pa., 1900.	Wood, steam derrick, 20 tons.
Red Dome..	Derrick.....	67 11½	30 0	Navy-yard, Norfolk, Va.	Navy-yard, Norfolk, Va., 1903.	Steel, 10-ton steam floating revolving derrick.
	Floating derrick.	132 0	44 0	Navy-yard, Norfolk.	Snare & Trlest Co., New York, 1903.	Wood, 120-ton.
	.....do.....	50 0	24 0	Navy-yard, Mare Island.	Navy-yard, Mare Island, 1900.	Wood, hand power, 8½ tons.
	.....do.....	70 8	40 0	Navy-yard, Boston.	1904.....	Wood, 20 tons.
	.....do.....	63 6	35 0	Navy-yard, Portsmouth, N. H.	Snare & Trlest, Kennebunk, Me.	Do.
	.....do.....	80 0	40 0	Naval Station, Olongapo.	Naval Station, Olongapo, 1908.	Wood, sheathed, 20 tons.
	Derrick barge.	61 3	31 4	Naval Academy.	Navy-yard, Norfolk, Va., 1903.	Wood, sheathed, 15 tons.
Hercules....	Cantilever pontoon crane.	100 0	60 0	Navy-yard, New York, N. Y.	Pontoon built by Wm. Cramp & Sons, Philadelphia, Pa.; hoisting machinery and arm by Brown Hoisting Machinery Co., Cleveland, Ohio, 1903.	Steel.
	Derrick barge.	69 7	31 5	Navy-yard, Pensacola, Fla.	Navy-yard, Pensacola, Fla., 1908.	Do.
Useful.....	.....do.....	45 0	19 0	Naval Torpedo Station, Newport, R. I.	Herreshoff Manufacturing Co., 1904.	Wood.
Alpha.....	Floating derrick and machine shop.	113 7	37 7	Navy-yard, New York, N. Y.	Navy-yard, New York, N. Y., 1905.	Steel, 10-ton steam floating revolving derrick.
Nan.....	.....do.....	68 0	30 0	Navy-yard, Boston, Mass.	Navy-yard, Boston, Mass., 1904.	Do.
	Floating workshop.	50 0	24 0	Navy-yard, Mare Island.	.....do.....	Wood, corrugated iron house.
	Floating workshop for submarines.	60 0	12 0	San Diego, Cal..	Navy-yard, Mare Island, 1909.	Wood, with wooden house.
	Barge.....	45 0	20 0	Midway Islands.	Navy-yard, Mare Island, Cal., 1905.	Wood, sheathed.

MISCELLANEOUS LIGHTERS, DERRICKS, BARGES, ETC.—Continued.

Number or name.	Kind.	Length.	Breadth.	Present location.	Where and when built or purchased.	Remarks.
No. 1.....	Fuel oil barge.	<i>Ft. in.</i> 87 0	<i>Ft. in.</i> 27 0	Navy-yard, Puget Sound.	Navy-yard, Puget Sound, 1909.	Steel.
No. 16.....	Fuel lighter.	51 0	20 9	Naval Academy.	.....	Wood, sheathed.
No. 23.....	Float..... Power float.	51 0 81 0	31 0 18 2	.....do..... Naval Station, Cavite, P. I.	.....do..... Naval Station, Cavite, P. I., 1906.	Do. Do.
No. 24.....	.....do.....	60 0	20 0	.....do.....	Naval Station, Cavite, P. I., 1908.	Do.
No. 11.....	Shear float..	45 3	14 3	.....do.....	Naval Station, Cavite, P. I., 1906.	Do.
	.....do.....	45 0	18 0	Building, Naval Station, Cavite, P. I.	Naval Station, Cavite, P. I., 1908.	Do.
Lorcha No. 1	Lighter.....	101 7	25 5	Naval Station, Cavite, P. I., Supplies and Accounts.	Hongkong, 1906.....	Do.
Lorcha No. 2	.....do.....	101 7	25 5	.....do.....	.....do.....	Do.
No. 3.....	Dredge.....	70 0	34 6	Navy-yard, Mare Island.	Navy-yard, Mare Island, 1905.	Wood.
	.....do.....	30 0	15 0	Naval Station, Culebra, P. R.	Naval Station, Culebra, P. R., 1907.	Wood, sheathed.
	.....do.....	75 0	30 0	Navy-yard, Pensacola.	Navy-yard, Pensacola, 1900.	Do.
No. 3.....	.....do.....	40 0	20 0	Naval Station, Olongapo, P. I.	Naval Station, Olongapo, P. I., 1907.	Do.
	Water barge for dredge.	20 0	9 0	.....do.....	.....do.....	Do.
No. 5.....	Scow for dredge.	30 0	12 0	.....do.....	.....do.....	Do.
No. 6.....	.....do.....	30 0	12 0	.....do.....	.....do.....	Do.
No. 4.....	.....do.....	50 0	20 0	.....do.....	Olongapo, J. G. White & Co.	Do.
	Pile driver..	40 0	20 0	Navy-yard, Boston, Mass.	1904.....	Wood.
	.....do.....	70 0	24 0	Navy-yard, New York.	T. A. Crane & Sons, New York, 1898.	Do.
	.....do.....	48 6	22 3	Navy-yard, Philadelphia, Pa.	Navy-yard, Philadelphia, Pa.	Do.
	.....do.....	50 0	25 0	Naval Academy.	Naval Academy, Snare & Triest.	Wood, sheathed.
	.....do.....	51 0	24 0	Navy-yard, Norfolk, Va.	.....do.....	Wood.
	.....do.....	45 5	20 5	.....do.....	.....do.....	Do.
	.....do.....	46 0	24 0	Navy-yard, Pensacola.	1907.....	Wood, sheathed.
	.....do.....	54 0	20 0	Naval Station, Guantanamo.	Naval Station, Guantanamo, Snare & Triest.	Do.
Rex.....	.....do.....	75 0	28 0	Navy-yard, Puget Sound.	Navy-yard, Puget Sound, 1901.	Wood.
No. 1.....	.....do.....	51 0	26 0	Navy-yard, Mare Island.	Navy-yard, Mare Island, 1904.	Do.
No. 2.....	.....do.....	60 0	28 0	.....do.....	.....do.....	Steel, wood house.
No. 3.....	.....do.....	50 0	20 0	Naval Station, Olongapo.	Olongapo, J. G. White & Co., 1908.	Wood.
	.....do.....	40 0	20 0	Naval Station, Hawaii.	.....do.....	W ed.
	.....do.....	80 0	18 3	Naval Station, Cavite, P. I.	Caseo No. 12 converted at Cavite, 1906.	Do.

LIST OF YARD TUGS (NOT OTHERWISE REPORTED) AT THE UNITED STATES NAVAL STATION, CAVITE, P. I.

Name.	Length.	Breadth inside fenders.	Received from and date.	Department assigned to.	Condition.	Remarks.
Balanga....	<i>Ft. in.</i> 69 0	<i>Ft. in.</i> 13 0	Captured with navy-yard.	Captain of the yard.	Good.....	Composite, cop- pered.
Barcelo....	69 10	12 8	.....do.....	.....do.....	.....do.....	Do.
Christine...	86 6	13 0	Purchased in Hongkong, May, 1902.	.....do.....	.....do.....	Do.
Iona.....	53 6	10 3	Captured with navy-yard.	.....do.....	.....do.....	Do.
Mercedes...	53 6	9 2	Returned to navy by customs au- thorities Nov. 15, 1902.	.....do.....	.....do.....	Wood, coppered.
Urdaneta..	69 3	12 7	Captured with navy-yard.	.....do.....	.....do.....	Iron. (Olonga- po).

CASCOs AT THE UNITED STATES NAVAL STATION, CAVITE, P. I.

Regis- tered No.	Dimensions.		Date received.	Department assigned to.	Condition.	Remarks.
	Length.	Breadth.				
7 ^a	<i>Ft. in.</i> 62 9	<i>Ft. in.</i> 18 9	Aug. 22, 1898	Supplies and Accounts.....	Good.....	Coppered.
16 ^a	85 9	18 0	.....do.....	.....do.....	.....do.....	
22	80 5	18 0	Aug. 15, 1899	.....do.....	.....do.....	Do.
24 ^b	88 10	14 0	—, 1906	.....do.....	Fair.....	Do.
25	91 5	13 4	—, 1906	.....do.....	.....do.....	
26	89 0	13 3	—, 1906	.....do.....	.....do.....	

^a Converted into a lighter.^b Converted into a dump scow.

Summary of vessels, fit for service and under construction, in the United States Navy, 1905 to 1910.

Type.	Fit for service, including those under repair.											
	1905.		1906.		1907.		1908.		1909.		1910.	
	Number.	Displacement.	Number.	Displacement.	Number.	Displacement.	Number.	Displacement.	Number.	Displacement.	Number.	Displacement.
		<i>Tons.</i>		<i>Tons.</i>		<i>Tons.</i>		<i>Tons.</i>		<i>Tons.</i>		<i>Tons.</i>
First-class battle ships.....	12	137,406	16	188,250	22	292,146	25	334,146	25	334,146	29	406,146
Second-class battle ship.....	1	6,315	1	6,315	1	6,315	1	6,315	1	6,315	1	6,315
Armored cruisers.....	6	72,085	6	72,085	8	101,085	11	142,945	12	157,445	12	157,445
Armored ram.....	1	2,183	1	2,183	1	2,183	1	2,183	1	2,183	.....	.....
Single-turret monitors.....	4	12,900	4	12,900	4	12,900	4	12,900	4	12,900	4	12,900
Double-turret monitors.....	6	26,104	6	26,104	6	26,104	6	26,104	6	26,104	6	26,104
Protected cruisers.....	19	76,070	20	85,770	22	105,170	22	105,170	22	105,170	22	105,170
Unprotected cruisers.....	3	6,216	3	6,216	3	6,216	3	6,216	3	6,216	3	6,216
Scout cruisers.....	.....	.....	.....	.....	.....	.....	2	7,500	3	11,250	3	11,250
Gunboats.....	11	14,658	9	11,564	9	11,564	9	11,564	9	11,564	9	11,564
Light-draft gunboats.....	3	4,155	3	4,155	3	4,155	3	4,155	3	4,155	3	4,155
Composite gunboats.....	7	7,105	8	8,190	8	8,190	8	8,190	8	8,190	8	8,190
Training ship, sheathed.....	1	1,175	1	1,175	1	1,175	1	1,175	1	1,175	1	1,175
Training ships, steel.....	.....	.....	.....	.....	2	3,600	2	3,600	2	3,600	2	3,600
Training brigantine.....	1	346	1	346	1	346	1	346	1	346	1	346
Special class.....	2	2,416	2	2,416	2	2,416	2	2,416	2	2,416	2	2,416
Gunboats under 500 tons.....	15	3,603	15	3,603	13	3,265	12	3,095	12	3,095	12	3,095
Torpedo-boat destroyers.....	16	6,695	16	6,695	16	6,695	16	6,695	16	6,695	21	10,195
Steel torpedo boats.....	33	5,262	35	5,737	35	5,737	35	5,737	33	5,299	33	5,299
Wooden torpedo boat.....	1	31	1	31	1	31	1	31	1	31	1	31
Submarine torpedo boats.....	8	935	8	935	8	935	12	1,719	12	1,719	18	3,485
Iron steam vessels.....	4	3,606	5	5,861	4	3,606	3	3,056	3	3,056	3	3,056
Wooden steam vessels.....	5	8,840	5	8,840	5	8,840	5	8,840	5	8,840	4	7,465
Wooden sailing vessels.....	8	10,045	8	10,045	8	10,045	5	5,895	5	5,895	5	5,895
Tugs.....	41	13,060	41	13,060	41	13,060	43	14,413	44	15,168	44	a 15,463
Auxiliary cruisers.....	5	28,339	5	28,339	5	28,339	5	28,339	5	28,339	5	28,339
Converted yachts.....	23	11,881	23	11,881	23	11,872	22	11,750	21	11,453	19	10,421
Coasters.....	15	674,854	15	674,854	15	674,854	15	674,854	15	674,854	20	b 135,417
Transports and supply ships.....	13	56,197	11	53,247	10	50,571	9	50,084	8	44,384	6	44,284
Hospital ships.....	1	3,300	1	3,300	1	3,300	1	3,300	2	9,000	2	9,000
Receiving ships.....	4	18,995	4	18,995	5	21,250	5	21,250	4	18,995	4	18,995
Prison ships.....	1	c 3,100	2	c 4,850	2	c 4,850	2	c 4,850	3	c 7,105	3	d 4,005
Total.....	270	617,877	276	687,942	285	830,815	292	918,833	292	937,103	308	1,067,537

Type.	Under construction.											
	1905.		1906.		1907.		1908.		1909.		1910.	
	Number.	Displacement.	Number.	Displacement.	Number.	Displacement.	Number.	Displacement.	Number.	Displacement.	Number.	Displacement.
		<i>Tons.</i>		<i>Tons.</i>		<i>Tons.</i>		<i>Tons.</i>		<i>Tons.</i>		<i>Tons.</i>
First-class battle ships.....	13	196,740	9	135,896	5	74,000	4	72,000	6	115,650	4	95,650
Armored cruisers.....	6	85,360	6	85,360	4	56,360	1	14,500	.....	.....	.....	.....
Protected cruisers.....	3	29,100	2	19,400	.....	.....	.....	.....	.....	.....	.....	.....
Scout cruisers.....	3	11,250	3	11,250	3	11,250	1	3,750	.....	.....	.....	.....
Composite gunboat.....	1	1,085	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Training ships, steel.....	2	3,600	2	3,600	.....	.....	.....	.....	.....	.....	.....	.....
Torpedo-boat destroyers.....	.....	.....	.....	.....	.....	.....	5	3,500	20	14,630	15	11,130
Steel torpedo boats.....	2	475	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Submarine torpedo boats.....	4	784	4	784	4	784	7	2,103	16	5,890	10	4,124
Tugs.....	.....	.....	.....	.....	2	1,510	2	1,510	1	755	.....	.....
Coasters.....	.....	.....	.....	.....	2	25,170	2	25,170	6	78,220	2	38,735
Total.....	34	328,394	26	256,290	20	169,074	22	122,533	49	215,145	31	149,639

a Excepting Locust.
b Excepting Justin.

c Includes Southerly.
d Excepting Southerly.

Summary of vessels in the United States Navy June 30, 1910.

Type.	Fit for service, including those under repair.		Under construction.		Authorized.		Unfit for sea service.		Total.	
	Number.	Displacement.	Number.	Displacement.	Number.	Displacement.	Number.	Displacement.	Number.	Displacement.
First-class battle ships....	29	<i>Tons.</i> 406,146	4	<i>Tons.</i> 95,650	2	<i>Tons.</i> 54,000			35	<i>Tons.</i> 555,796
Second-class battle ship....	1	6,315							1	6,315
Armored cruisers.....	12	157,445							12	157,445
Single-turret monitors....	4	12,900							4	12,900
Double-turret monitors....	6	26,104							6	26,104
Protected cruisers.....	22	105,170							22	105,170
Unprotected cruisers.....	3	6,216							3	6,216
Scout cruisers.....	3	11,250							3	11,250
Gunboats.....	9	11,564							9	11,564
Gunboat for Great Lakes....					1	(a)			1	(a)
Light-draft gunboats.....	3	4,155							3	4,155
Composite gunboats.....	8	8,190							8	8,190
Training ship, sheathed....	1	1,175							1	1,175
Training ships, steel.....	2	3,600							2	3,600
Training brigantine.....	1	346							1	346
Special class.....	2	2,416							2	2,416
Gunboats under 500 tons....	12	3,095							12	3,095
Torpedo-boat destroyers....	21	10,195	15	11,130	6	4,452			42	25,777
Steel torpedo boats.....	33	5,299							33	5,299
Wooden torpedo boat.....	1	31							1	31
Submarine torpedo boats....	18	3,485	10	4,124	8	(b)			36	c 7,009
Iron steam vessels.....	3	3,056							3	3,056
Wooden steam vessels.....	4	7,465					4	5,715	8	13,180
Wooden sailing vessels....	5	5,895					2	6,350	7	12,245
Tugs.....	44	d 15,463							44	d 15,463
Auxiliary cruisers.....	5	28,339							5	28,339
Converted yachts.....	19	10,421							19	10,421
Colliers.....	20	e 135,417	2	38,735	3	58,110			25	e 232,262
Transports and supply ships.....	8	44,384							8	44,384
Hospital ships.....	2	9,000							2	9,000
Receiving ships.....	4	18,995					5	18,790	9	37,785
Prison ships.....	3	f 4,005					1	1,100	4	f 5,105
Total.....	308	1,067,537	31	149,639	20	116,562	12	31,955	371	1,365,693

a Not designed.

b Contracts not signed.

c Excepting the eight authorized.

d Excepting Locust.

e Excepting Justin.

f Excepting Southerly.

NOTE.—Since the compilation of these tables the Bureau has been notified that the army transport *Ingalls* has been transferred to the Navy by act of Congress approved Mar. 23, 1910.

Very respectfully,

W. L. CAPPS,
Chief Constructor U. S. Navy,
Chief of Bureau.

The SECRETARY OF THE NAVY.

REPORT OF THE CHIEF OF THE BUREAU OF STEAM ENGINEERING.

DEPARTMENT OF THE NAVY,
BUREAU OF STEAM ENGINEERING,
Washington, D. C., September 28, 1910.

SIR: In obedience to your order of July 28, 1910, the following annual report of the operations of this bureau for the fiscal year ending June 30, 1910, is respectfully submitted:

FINANCIAL STATEMENT.

Appropriation, steam machinery, 1909-10.

Amount appropriated for fiscal year ending June 30, 1910, act approved March 3, 1909.....	\$6,655,700.00
Labor in navy-yards and stations in repair of steam machinery, boilers, etc., of naval vessels fitting for sea service, preservation and repair of tools, handling and preservation of materials, stores, etc.....	\$2,976,856.41
Purchase of materials, stores, machine tools, and incidental expenses.....	2,996,793.10
Payments for repairs, materials, and incidental expenses for ships on foreign stations.....	789,143.57
	6,762,793.08
Less refunds by transfers in adjustment of appropriations and deposits by paymasters to September 1, 1910.....	266,390.39
Total expenditure.....	6,496,402.69
Unobligated balance September 1, 1910.....	159,297.31

OPERATIONS OF THE BUREAU.

In addition to the examination and preparation of plans for repairs and alterations to machinery of vessels in commission, and those fitting out at navy-yards, and for the construction of new machinery and boilers building at navy-yards and by contract, the work of the drafting room of the bureau has been principally upon plans, specifications, and estimates for the machinery of battle ships Nos. 32 and 33, the *Wyoming* and *Arkansas*, and torpedo-boat destroyers Nos. 32 to 36, inclusive, which have been completed, and the contracts for these vessels awarded. Also plans, specifications, and estimates for machinery of battle ships Nos. 34 and 35 have been well advanced, as are also those for destroyers Nos. 37 to 42, inclusive. Other designs have been prepared for battle ships with water-tube boilers fitted for the use of both oil fuel and coal, the oil fuel to be used in conjunction with coal, or independently, and designs for destroyers for water-tube boilers with oil fuel only.

The methods for inspection of material for naval use have been much improved during the year along the lines of having such material inspected as far as possible at the place of manufacture; the simplification and reduction of the correspondence and routine work of the inspection offices; the thorough overhauling and revision of the specifications for inspection of material, to secure the best commercial material where needed for the service, and eliminating all requirements that were not essential for this purpose, or that necessitated the use of a specially manufactured article; and that the methods of inspection should be made uniform in all districts.

Some vexatious delays in delivery of material have been experienced owing to lack of laboratory facilities for the necessary chemical analyses, but with the increased facilities which are being installed at several of the navy-yards it is believed that shortly the manufacturers will have no cause of complaint from this source.

During the year the inspection force has been graded, and a general plan for the promotion of the classified employees has been submitted to the department.

Inspections have been made at 403 manufacturing establishments in 8 districts in charge of 9 officers with 26 civilian assistants. The total weight of material inspected for the different bureaus is as follows:

	Pounds.
Steam Engineering.....	17, 375, 377
Yards and Docks.....	11, 078, 785
Supplies and Accounts.....	5, 187, 399
Navigation.....	681, 653
Equipment.....	1, 428, 698
Construction and Repair.....	256, 580
Medicine and Surgery.....	24, 435
Ordnance.....	90, 880
Miscellaneous.....	33, 828

The bureau has submitted in its estimates for an increase of its clerical force, which is now inadequate to consider thoroughly and in a businesslike manner all the valuable reports and returns that are being made. There should be not less than six clerks, one messenger boy, and one laborer additional allowed for this purpose.

The bureau also can not too strongly urge for increased compensation for its clerical and drafting force. Aside from the question of the greatly enhanced cost of living, so largely reducing the actual compensation below what it was a few years ago, the bureau bases its strongest plea for this increase upon the fact that to a very large extent the work of the bureau is purely technical, requiring a high and peculiar order of ability in its clerks and draftsmen which it is difficult to secure and retain at their present salaries. For this reason it is urged that immediate provision be made for higher pay for these employees.

The work at the navy-yards has principally been as follows:

General overhauling of the machinery of the battle ship *Kearsarge*, *Kentucky*, *Illinois*, and *Alabama* which is now in progress. Good progress has been made on the general overhaul of the *Maine*, and her boilers, which are building by contract, are practically ready for installation. It was contemplated that the *Wisconsin* also would require a general overhaul, but after a thorough inspection by the board of inspection and survey for ships, her machinery was found to be in such good condition as to justify her continuance in service

with minor repairs. This work is now proceeding at the navy-yard, Portsmouth, N. H.

Repairs of an extensive nature are also being carried out at the Mare Island Navy-Yard on the armored cruisers *Maryland* and *West Virginia*. By keeping them in commission and utilizing the ships' force it will be possible to materially reduce the cost of work, and at the same time have the vessels ready for duty with the fleet in much shorter time than if they had been put out of commission. Similar repairs on the *Cincinnati* and *Raleigh* are in progress, but are suspended from time to time in order that work on vessels of the Pacific Fleet may proceed without interruption.

At the Puget Sound Navy-Yard comparatively little progress was made on the *Oregon* owing to the fact that the work has been carried on only during the absence of cruising vessels from the yard. This has necessarily resulted in greatly increasing the cost of work on this vessel, but the practice of having such a ship under repair, especially in a locality where the labor market is restricted, possesses the great advantage of enabling the department always to command the services of a force of skilled workmen who but for these "stand-by" jobs would have to be discharged, and whose places it would be difficult to fill when mechanics are wanted for work on the fleet.

At the New York Navy-Yard satisfactory progress has been made on the machinery of the *Florida*, though its completion has been delayed by slow delivery of forgings, and is now somewhat hampered by lack of large tools for machining turbine casings. The successful casting of the large turbine casings for this vessel without the loss of a single casting reflects great credit upon the organization of this yard and upon the skill of the workmen who were employed on the work. Extensive overhauling and repair of machinery with new Babcock & Wilcox boilers were completed to the *Baltimore* at the New York yard during the fiscal year.

The most important work undertaken at Norfolk was changing the engines of the *Louisiana* and *Virginia* from in-turning to out-turning. The work was accomplished in so satisfactory a manner that both vessels were, after very slight "tuning-up," able to join the fleet at Guantanamo and run their full-speed trials in a manner which reflected the highest credit on the engine-room personnel and on the machinery division of the Norfolk yard. Not the least gratifying feature of this change is the fact that it was made for about 55 per cent of what the contractors wanted for doing it before the machinery was installed.

The bureau recently incorporated in its specifications a requirement that boilers acceptable for installation in battle ships must meet certain definite requirements regarding evaporative efficiency. These requirements were made so high as to insure that the boilers installed would meet every requirement of the service, and it is a pleasure to report that the first boiler tested, a Babcock & Wilcox representing the boiler installation for the *Arkansas* and *Wyoming*, more than meets the requirements. The next boiler to be tested will be a Mosher, representing the equipment for the *Kearsarge*, the *Kentucky*, and the *Illinois*.

At some of the navy-yards some increases in the force of classified employees have become a necessity, and a general rerating, with corresponding compensation, permitted, so that employees perform-

ing the same kind of duties shall receive the same pay. This can not be done under the present allowance made by Congress for the pay of these employees from appropriation "Steam machinery." For this reason the bureau has requested in its estimates that the limit shall be extended to \$400,000. It should be noted that this does not increase the total of the appropriation but only increases the amount that may be used from the current appropriation for pay of the classified force under the bureau at navy-yards, inspection offices, etc.

GENERAL OPERATIONS.

Extensive trials have been carried out to determine the relative backing powers of turbines and reciprocating engines in the scout cruisers *Birmingham* with reciprocating engines, *Chester* with Parsons turbines, and *Salem* with Curtis turbines.

These trials were conducted with great care and thoroughness under conditions as nearly identical for vessels of each class as possible, and the results, which have been submitted to the department in the form of reports, are an authoritative indication of the relative backing powers of the three types of machinery as now installed.

During the year limited experience has been had with the burning of oil fuel as auxiliary to coal in the battle ships *Delaware* and *North Dakota*. In the case of the battle ships the oil is intended to be used only to assist in maintaining power on long full-power runs, after the coal fires become dirty, or when the trimming of coal in the fire-room bunkers becomes difficult. Its use in these vessels is not intended to increase the power developed, and inasmuch as it is sprayed on top of a coal fire with a restricted combustion space, satisfactory burning of the oil in battleships has been difficult of accomplishment.

A high speed marine steam turbine with reduction gear is being installed in the collier *Neptune*, now building at the works of the Maryland Steel Company, Sparrows Point, Md. She is to be a twin-screw vessel, displacing 19,360 tons, with a speed of 14 knots. Steam at a pressure of 200 pounds will be supplied by three double-ended Scotch boilers to a Westinghouse-Parsons turbine on each shaft, each turbine developing about 4,000 S. H. P. on 1,500 revolutions at full power. Between each turbine and its propeller shaft is to be interposed a Melville-McAlpine gear reducing the propeller speed to 136 revolutions per minute.

Tests have been completed during the year at the Norfolk Navy-Yard of 19 representative types of internal combustion engines for launches. Of this number 9 proved to be suitable for the naval service.

Considerable progress has been made on shore in the development of bituminous producer gas-power plants. Owing to a lack of funds the bureau has been unable to do its part in the development of the internal combustion engine for large naval vessels. As stated in the bureau's last annual report, we can not afford to delay this development, and the recommendation is renewed for authority to expend as much as \$250,000 under "Steam machinery" for the purchase and installation of an internal combustion-engine plant in a naval collier or other suitable hull, in the event that it is thought wise to experiment along this line.

Designs have been prepared for a proposed repair ship of 13,500 tons displacement and 14 knots speed. The acquisition of such a vessel is believed to be of vital military importance to the fleet, in that it will in time of war enable the fleet to repair damages sufficiently to render the fleet seaworthy, or enable it to renew action. In time of war or peace it will render the fleet self-sustaining as regards repair work of machinery, except that necessitated in general refitting.

It is therefore earnestly recommended that two such vessels be included in the next naval appropriation bill, one for service with each important fleet.

CONDITION OF MACHINERY OF VESSELS CONSTRUCTED OR UNDER CONSTRUCTION AT PRIVATE SHIPYARDS, JULY 1, 1910.

The machinery of the following new vessels has been completed during the year and the vessels delivered to the Government, viz:

Battle ships *South Carolina*, *Michigan*, *Delaware*, and *North Dakota*.

Torpedo-boat destroyers *Smith*, *Lamson*, *Preston*, *Flusser*, and *Reid*.

Submarine torpedo boats *Stingray*, *Tarpon*, *Bonita*, *Snapper*, *Narwhal*, *Grayling*.

Colliers *Mars*, *Vulcan*, and *Hector*.

The following are the percentages of completion of the machinery of the vessels named, now under construction, viz:

Battle ships: *Utah*, 81.52; *Wyoming*, 13.3; *Arkansas*, 26.57; *Florida* (New York Navy-Yard), 66.59.

Torpedo-boat destroyers: *Paulding*, 91.68; *Drayton*, 88.71; *Roe*, 92.4; *Terry*, 80.1; *Perkins*, 79.77; *Sterett*, 71; *McCall*, 83.29; *Burrows*, 79.11; *Warrington*, 73.92; *Mayrant*, 74.44; *Monaghan*, 33.5; *Trippe*, 64; *Walke*, 41; *Ammen*, 30.94; *Patterson*, 41.64.

Submarine torpedo boats: *Carp*, 47.52; *Barracuda*, 47.52; *Pick-erel*, 47.52; *Skate*, 47.52; *Skipjack*, 35; *Sturgeon*, 35; *Thrasher*, 2.43; *Tuna*, 11.6; *Seal*, 28.6.

Colliers: *Cyclops*, 89.32; *Neptune*, 11.35.

ENGINEERING EXPERIMENT STATION, ANNAPOLIS, MD.

During the past fiscal year 58 tests were ordered of which 23 were completed, 22 are still under way, and 2 canceled. The tests include one of 500-horsepower turbine engine, one rotary engine, circulation of main boiler; auxiliary machinery such as blowers and evaporators; friction clutch; engine room apparatus, such as gauges, grease cups, reducing valves, revolution counters, steam traps, steam pipe and insulating device, boiler fittings, safety valves, baffles, water gauge glasses, feed regulator, whistles, tube cleaners; engineering supplies, sheet and rod packings, gaskets and gauge grommets, illuminants, metals, disk valves, boiler compounds, and fuel briquettes. Included in the above there are 11 tests ordered which can not be begun until some of those on hand can be completed. A number of the above tests have been made for private corporations or individuals, who in such cases defray all expenses. Sixty-two varieties of sheet packing and 79 of

rod packing have been submitted, a large number of which have been tested.

In most cases, owing to the pressure of other business, tests have to be brought to a conclusion as soon as a satisfactory answer is obtained to the specific questions asked by the bureau or by the applicant for the test. In many instances, however, during the progress of the work other interesting questions have arisen, and it would have been very profitable to pursue the investigations far beyond the point originally intended.

One of the most pressing needs at present is to frame better specifications, which can readily be done when sufficient data are accumulated from the tests in progress, and some important changes have already been made based on the information obtained in these tests.

The work of extension of the bulkhead, appropriated for last year, is nearly completed, sufficiently so to allow of the dredging of the ship basin and coal dock. This work will materially improve conditions, as the present small basin is often crowded and it is difficult to arrange berths for all the various crafts desiring to enter at the same time.

PERSONNEL.

The engineering personnel of the navy is at present in a very efficient condition. The best sign of its healthy condition is the fact that we are still making progress. The department has indicated its appreciation of the part that engineering plays in naval efficiency, and has thus developed general interest in engineering work. The present system of organization has opened up to officers of the line who develop engineering talent positions of responsibility and authority, and furnishes a field for the exercise of such talent after reaching high rank. This has encouraged officers who have a pronounced liking for engineering duty to continue in such work and further develop their talent for it. The department has established periods for repair and overhaul of vessels in the fleet by their own crews, which not only encourages self-maintenance of the fleet, but further develops the all-around ability of engineer officers. The new fleet organization requires of engineer officers a degree of ability and foresight that were not essential when semiannual visits to navy-yards for repairs were the rule.

The establishment of the School of Marine Engineering has carried out the intent of the personnel legislation of 1899; has provided for an ample, though small, number of designing naval engineers; has promoted an interest and established engineering in the navy on a plane that is distinctly higher than it has occupied before. There is a widespread effort among young officers who are eligible for selection as students at this school to make their records of service, which alone govern their selection, so thoroughly good as to secure to them this desirable detail. The curriculum of the school has been arranged to take advantage of the assured individuality of officers thus selected. No school can make designing engineers, but this school gives officers that have proved their interest and ability, an opportunity to develop their technical ability along theoretical and practical lines somewhat different from those ordinarily found in naval service. Though as yet it has turned out no graduates, the school has promoted this spirit of emulation, and the graduates will soon be able to replace

the older engineers as these latter pass from the active list of the navy.

The system of engineering competition that has recently been introduced has placed all engineer officers on their mettle. By including engineering efficiency in the calculation of the battle efficiency of our vessels, the professional reputation of all officers in the navy has been made to depend to a certain extent upon the engineering efficiency of the vessel upon which they may be serving. Defects in the machinery handicap a ship, and every reasonable effort is now being made by officers to eliminate such defects. This is a great assistance to this bureau in leading to more complete and exact information as to defects in machinery than could otherwise have been secured.

The improved efficiency of the engineering personnel has affected greatly the economy of operation of the machinery plant on naval vessels.

The bureau has recently introduced a new steam log that furnishes data in a more complete and accessible form than heretofore. This new log has caused a more thorough investigation of the details of operation of the machinery plant of naval vessels, and will probably serve to bring to light defects that would otherwise pass unnoticed for a considerable time.

The expenditures for engineering stores have been materially reduced due to improved methods of purchase introduced and extended by the Bureau of Supplies and Accounts.

It has been the policy of this bureau to use a part of the saving in its appropriations, that has been effected by improvement in the operating efficiency of the machinery, for the purchase and installation of improvements to the machinery plants of naval vessels. By this means the facility, economy, and safety of operation of machinery has been improved and the power and value of the fleet as a national asset has been increased. Among the improvements to the machinery plants that have been more or less completely installed throughout the navy may be mentioned new boilers of improved design, new propellers of increased efficiency, improved evaporating plants for making fresh water, improved pumps, forced lubrication, gasoline engines in motor boats, improved furnaces for water tube boilers and improved piping and valves.

Full-speed trials under strictly service conditions have been successfully carried out on most of the vessels of the navy, and every improvement in the machinery plant that was shown to be necessary by these trials has been installed.

It is the desire of this bureau to continue installing improvements to machinery plants on naval vessels as far as possible. These improvements are expected to further reduce the cost of operation of the machinery, to materially improve the steaming radius of the fleet, and to decrease the danger of casualty. The number of possible improvements is extremely great, and it is not always sound economy to install devices that lead to decreased coal consumption. It is undoubtedly wise to install such devices as will, through the economies that they effect, pay for themselves within the assured actual service of the vessel on which they are installed, provided they increase the military efficiency. Devices intended to improve the safety and facility of operation of the machinery have been installed

as occasion offered, but those merely tending to improve the economy of operation of machinery have been installed only when the economies effected by their installation were believed to be such as would pay for the entire installation, including the cost of maintenance, within three years. It is understood that in commercial practice engineering improvements are generally installed when their cost can be covered by the saving they effect within ten years. Evidently such expenditures for improvements such as this bureau has been able to make have been commercially justified, and it is probable that if a larger appropriation were available for the improvement of the machinery plants of naval vessels the total cost of operation of the navy might be still further reduced.

The work done at navy-yards during the last year has been more satisfactorily accomplished under the existing system of yard organization than hitherto, and one of the principal advantages of the present system lies in the aid and encouragement that it offers to successful engineer officers. From the point of view of this bureau the improvement in the engineering personnel is principally responsible for improvement in operating efficiency. The present condition is satisfactory because, while everyone is doing his utmost to make the machinery work well, no one is content with the progress made, but all are working earnestly to secure improved designs and methods of operation.

REGISTER OF SHIPS.

BUREAU OF STEAM ENGINEERING.

MACHINERY DATA OF ALL SHIPS CARRIED ON THE ACTIVE LIST AND THOSE AUTHORIZED BY CONGRESS AND NOW UNDER DESIGN OR CONSTRUCTION.

Reports on condition and stations of ships are as appear on the date of July 1, 1910.

The speed and power figures are those obtained from the trial performance of the vessel on acceptance by the navy, except in the case of those vessels reboilered or reengined by the Navy Department, when the data are obtained from the first speed trial after completion of work.

Coal endurance has been developed from the figures and curves of coal consumption averaged from a large number of cruising records of the individual ship.

Tables arranged as follows:

United States naval vessels (over 600 tons), destroyers, and torpedo boats.

Gunboats and converted yachts (under 600 tons).

United States naval tugs.

Wooden steam vessels unfit for sea.

Vessels with boilers but without propelling machinery.

Abbreviations:

Engines—

Vert. 3-exp. (2)=Vertical triple expansion, two screws.

Hor. comp. (1)=Horizontal compound, single screw.

Incl. comp. (2)=Inclined compound, two screws.

Turb.=Turbines.

Boilers—

S. E.=Single-ended, cylindrical.

D. E.=Double-ended, cylindrical.

S. W.=Straight-away, cylindrical.

B. & W.=Babcock & Wilcox.

Miscellaneous—

T. B.=Torpedo boat.

G. B.=Gunboat.

Res.=Reserve.

Arm.=Armored.

Conv.=Converted.

Prot.=Protected.

Out Com.=Out of commission.

Machinery data of United

	Name of vessel.	Type of vessel.	Displacement.	Type of engine.	Cylinder diameter.			Stroke.	Number and type of boilers.	Total grate surface.
					H. P.	I. P.	L. P.			
1	Abarenda...	Collier.....	Tons. 4,670	Vert. 3-exp. (1)...	In. 23	In. 38	In. 62	In. 42	2 S. E.....	Sq. ft. 106
2	Adams.....	Cruiser.....	1,375	Hor. comp. (1)...	34½	51½	42	42	4 S. E.....	124
3	Adder.....	Submarine t. b.	122	Otto gasoline b...					None.....	
4	Ajax.....	Collier.....	7,500	Vert. 3-exp. (1)...	27	44½	71	60	3 S. E.; 1 auxy..	253.5
5	Alabama...	Battleship...	11,569	Vert. 3-exp. (2)...	33½	51	78	48	8 S. E.....	697.6
6	Albany.....	Prot. cruiser...	3,700	do.....	31	40	70	30	4 D. E.....	468
7	Alert.....	Cruiser.....	1,030	Hor. comp. (1)...	28½	42½	42	42	2 B. & W.....	96
8	Alexander..	Collier.....	6,181	Vert. 3-exp. (1)...	24½	42	64	39	2 D. E.; 1 auxy..	105
9	Ammen....	T. b. destroyer.	a 742	Parsons turb. (3)					4 Thornycroft.	(e)
10	Amphitrite.	Monitor.....	3,990	Incl. comp. (2)...	32	48	42	42	4 B. & W.....	314
11	Annapolis..	Comp. g. b.....	1,060	Vert. 3-exp. (1)...	15	24½	40	28	2 B. & W.....	100
12	Arethusa...	Tank steamer.	6,200	do.....	25½	40	66	45	2 D. E.; 1 auxy..	139.2
13	Arkansas...	Battle ship...	a 26,000	Parsons turb (4)...					12 B. & W.....	1,423
14	Atlanta.....	Prot. cruiser...	3,000	Hor. 3-exp. (1)...	34	50½	74½	42	4 B. & W.; 2 S. E.	303
15	Bagley....	Torpedo boat..	167	Vert. 3-exp. (2)...	17.22	24.78	37.37	21	2 Normand....	118
16	Balley.....	do.....	235	do.....	20	30½	32 g	18	3 Normand....	178.1
17	Bainbridge.	T. b. destroyer.	452	do.....	20½	32	38 g	22	4 Thornycroft.	315
18	Baltimore..	Prot. cruiser...	4,413	Hor. 3-exp. (2)...	42	60	94	42	8 B. & W. f.....	a 659
19	Burney.....	Torpedo boat..	167	Vert. 3-exp. (2)...	17.22	24.78	37.37	21	2 Normand....	118
20	Barracuda..	Submarine t. b.		6-cyl. 4 cycle (2)...	12½			13½	None.....	
21	Barry.....	T. b. destroyer.	462	Vert. 3-exp. (2)...	30½	32	38 g	22	4 Thornycroft.	315
22	Biddle.....	Torpedo boat..	168	do.....	17.22	24.78	37.37	21	2 Normand....	118
23	Birmingham	Scout.....	3,750	do.....	28½	45	62 g	36	12 Fore River..	686
24	Blakely....	Torpedo boat..	165	do.....	14	22	25½ g	18	3 Normand....	150
25	Bonita....	Submarine t. b.		6-cyl. 4 cycle (2)...	11			12	None.....	
26	Brooklyn..	Arm. cruiser..	9,215	4 vert. 3-exp. (2)...	32	47	72	42	5 D. E.; 2 S. E.	1,016.2
27	Brutus.....	Collier.....	a 6,000	Vert. 3-exp. (1)...	24	40	64	42	2 S. E.; 1 auxy..	123.4
28	Buffalo...	Conv. cruiser..	6,888	do.....	32	52	84	54	3 D. E.....	409.5
29	Burrows...	T. b. destroyer.	a 742	Parsons turb. (3)...					4 Thornycroft.	(e)
30	Cesar.....	Collier.....	5,016	Vert. 3-exp. (1)...	22½	37	61	42	2 D. E.; 1 auxy..	104
31	California..	Arm. cruiser..	13,680	Vert. 3-exp. (2)...	35½	63½	74 g	48	16 B. & W.....	1,591.4
32	Carp.....	Submarine t. b.		6-cyl. 4 cycle (2)...	12½			13½	None.....	
33	Castine...	Gunboat.....	1,177	Vert. 3-exp. (2)...	15½	22½	35	24	2 S. W.....	120
34	Celle...	Supply ship...	6,128	Vert. 3-exp. (1)...	26½	44	72	48	4 B. & W.....	250

a Estimated.

b Surface.

c Submerged.

d Gallons gasoline.

States naval vessels.

	Total heating surface.	Trial speed.	Total maximum I. H. P.	Total bunker capacity.	Coal endurance at 10 knots per hour.	Total weight of machinery.	Present condition of machinery as per last report.	Present service.
	<i>Sq. ft.</i>	<i>Knots.</i>		<i>Tons.</i>	<i>Knots.</i>	<i>Tons.</i>		
1	4,000	a 9.5	1,050	813	6,990		Good.....	Special service.
2	3,172	9.8	800	141	2,200		.....do.....	State school-ship, Pa.
3		{ b 8.73 c 7.08 }	70	d 850			Excellent.....	Asiatic Torpedo Fleet.
4		a 12	a 3,100	450			Good.....	Special service.
5	21,602	17.01	11,366	1,330	4,591	1,206.37	Fair.....	Out com., New York.
6	13,156	20.52	a 7,500	750	4,375	684.92	Under repairs.....	Puget Sound yard.
7	4,250	10	560	197	3,742		Fair.....	Out Com., Mare Isd.
8	4,016	a 9	1,026	800	6,858		Good.....	Out Com., Cavite.
9	19,200	a 29.5	a 2,000	a 210			30.95 per cent completed.	New York S. B. Co.
10	12,240	12	1,600	271	1,300		Fair.....	Missouri Nav. Milltia.
11	3,814	13.17	1,227	230	4,130	100.82	Good.....	Station ship, Tutulla.
12	5,474	a 10	a 1,700	560	6,400		.....do.....	Norfolk yard.
13	64,234	a 20.5	a 28,000	a 2,500			26.57 per cent completed.	New York S. B. Co.
14	10,824	a 15½	a 3,500	575	3,594	a 539	Good.....	In res., Charleston.
15	5,552	29.15	a 3,920	43			.....do.....	Naval Academy.
16	8,328	30.20	a 5,000	95		147.4	Excellent.....	Res. torp. division.
17	17,768	28.45	a 8,000	169	2,649	208.8	Good.....	Asiatic Torpedo Fleet.
18	a 26,850	19.5	8,978	1,075	5,300		Under repairs.....	Out com., Philadelphia.
19	5,552	29.04	a 3,920	43		a 80	Excellent.....	In res., Charleston.
20			780	11,050			47.52 per cent completed.	Union Iron Works.
21	17,768	28.12	a 8,000	169		208.85	Excellent.....	Asiatic Torpedo Fleet.
22	5,552	28.57	a 3,910	43			Under repairs.....	Res., Charleston.
23	37,992	24.33	15,889	1,400			Excellent.....	Special service.
24	7,575	25.58	3,000	72		a 80	.....do.....	Res., Charleston.
25		b 10.5	a 500	d 3,900			Good.....	Atlantic Torpedo Fleet.
26	32,538	21.91	18,770	1,350	5,000	1,333.8	Fair.....	Out com., Philadelphia.
27	4,000	a 9	a 1,200	547	3,800		Good.....	Do.
28	13,513	a 14.5	a 3,600	1,375	7,800		Very good.....	Special service.
29	19,200	a 29.5	a 12,000	e 210			79.11 per cent completed.	New York S. B. Co.
30	3,760	a 10	a 1,500	761	8,526		Good.....	Special service.
31	70,928	22.2	29,658	2,075	5,000		Very good.....	Pacific Fleet.
32			780	11,050			47.52 per cent completed.	Union Iron Works.
33	4,930	16.3	2,199	210	3,000	144.84	Very good.....	Tender 3rd Subm. div
34	8,140	a 10.5	a 1,690	739	6,000		Good.....	Atlantic Fleet.

e Oil fuel.

f Proposed.

g Two low-pressure cylinders.

Machinery data of United

	Name of vessel.	Type of vessel.	Displacement.	Type of engine.	Cylinder diameter.			Stroke.	Number and type of boilers.	Total grate surface.
					H. P.	I. P.	L. P.			
			Tons.		In.	In.	In.	In.		Sq. ft.
1	Charleston..	Prot. cruiser...	9,700	Vert. 3-exp. (2)..	36	59½	a 69	45	16 B. & W....	1,400
2	Chattanooga	Cruiser.....	3,100	.....do.....	18	29	a 35½	30	6 B. & W....	300
3	Chauncey ..	T. b. destroyer	400	.....do.....	20½	32	a 38	22	4 Thornycroft.	315
4	Chester.....	Scout.....	3,750	Parsons turb. (4).					12 Normand...	696
5	Cheyenne...	Monitor.....	3,218	.....do.....	17	26½	40	24	4 B. & W....	216
6	Chicago.....	Prot. cruiser..	5,000	Hor. 3-exp. (2)..	33½	50½	76	40	6 B. & W.; 4 S. E.	633.3
7	Cincinnati..	.....do.....	3,213	Vert. 3-exp. (2)..	24	44½	a 57	33	8 B. & W....	507
8	Cleveland ..	Cruiser.....	3,100	.....do.....	18	29	a 35½	30	6 B. & W....	300
9	Colorado....	Arm. cruiser..	13,680	.....do.....	38½	63½	a 74	48	32 Niclausse...	1,600
10	Columbia...	Prot. cruiser..	7,375	Vert. 3-exp. (3)..	42	59	92	42	8 D. E.; 2 S. E.	1,408
11	Connecticut	Battle ship....	16,000	Vert. 3-exp. (2)..	32½	53	a 61	48	12 B. & W....	1,097
12	Craven.....	Torpedo boat.	146	.....do.....	17½	24½	37	21	2 Normand....	118.7
13	Culgoa.....	Supply ship...	6,300	Vert. 3-exp. (1)..	28	44½	a 72	48	2 D. E.; 1 auxy	186
14	Cushing....	Torpedo boat.	105	Vert. 4-exp. (2)..	11½	16 2/3	a 22½	15	2 Thornycroft.	76.6
15	Cuttlefish...	Submarine t. b.	170	6 cyl. gasoline...	11			12	None.....	
16	Cyclops.....	Collier.....		Vert. 3-exp. (2)..	27½	46	76	48	3 D. E.....	450
17	Dahlgren...	Torpedo boat.	146	.....do.....	17½	24½	37	21	2 Normand....	118.7
18	Davis.....	.....do.....	132	.....do.....	11½	19	a 22½	15	2 Thornycroft.	88
19	Dale.....	T. b. destroyer	457	.....do.....	20½	32	a 38	22	4 Thornycroft.	315
20	Decatur.....	.....do.....	450	.....do.....	20½	32	a 38	22	.....do.....	315
21	Delaware...	Battle ship....	20,000	.....do.....	36	57	a 76	48	14 B. & W....	1,439
22	De Long....	Torpedo boat.	192	.....do.....	14	22	a 25½	18	3 Normand....	150
23	Denver.....	Cruiser.....	3,100	.....do.....	18	29	a 35½	30	6 B. & W....	300
24	Des Moines.	.....do.....	3,100	.....do.....	18	29	a 35½	30	.....do.....	300
25	Detroit.....	.....do.....	2,089	.....do.....	26½	39	63	26	3 D. E.; 2 S. E.	367.9
26	Dixie.....	.....do.....	6,145	Vert. 3-exp. (1)..	33	52	84	54	3 D. E.....	414
27	Dolphin....	Dispatch boat.	1,480	Vert. comp. (2)..	42		78	48	2 D. E.; 2 S. E.	269.6
28	Don Juan de Austris.	Gunboat.....	1,150	Hor. comp. (1)..	40		70	30	4 S. W.....	164
29	Drayton....	T. b. destroyer	c 742	Parsons turb. (3).					4 Normand....	(c)
30	Dubuque...	.....do.....	1,000	Vert. 3-exp. (2)..	9	15½	25½	21	2 B. & W....	99.8
31	Dupont.....	Torpedo boat.	165	.....do.....	16	22½	a 25	16	3 mod. Normand.	160.6
32	Ericsson....	.....do.....	120	Vert. 4-exp. (2)..	11½	16 2/3	a 21½	30	2 Thornycroft.	85

a Two low-pressure cylinders.

b Submerged.

c Estimated.

States naval vessels—Continued.

	Total heating surface.	Trial speed.	Total maximum I. H. P.	Total bunker capacity.	Coal endurance at 10 knots per hour.	Total weight of machinery.	Present condition of machinery as per last report.	Present service.
	<i>Sq. ft.</i>	<i>Knots.</i>	<i>Tons.</i>	<i>Knots.</i>	<i>Tons.</i>			
1	64,000	22.04	27,507	1,700	1,860		Good.....	Asiatic Fleet.
2	13,200	b 16.5	5,396	675	6,925	e 405	.....do.....	Special service.
3	17,768	23.64	8,000	169	e 3,024	e 189	Very good.....	Asiatic Torp. Fleet.
4	32,040	26.52	23,900	1,375	6,045	795	Excellent.....	Special service, squadron.
5	8,800	11.8	2,452	d 129	.....	263.30	Good.....	First Res., Mare Island.
6	23,253	e 18	9,000	889	3,806	921.64	.....do.....	Mass. Naval Militia.
7	19,840	19.9	8,490	575	4,500	.....	.....do.....	Out com., Mare Island.
8	13,200	16.45	4,685	675	6,925	e 405	Very good.....	Special service.
9	68,537	22.24	27,374	1,778	.....	2,163	Good.....	Pacific Fleet.
10	45,221	22.8	18,509	1,525	6,800	1,705.9	Under repairs.....	Out com., Philadelphia.
11	52,752	18.78	20,525	2,452	5,000	1,651	Very good.....	Flagship, Atlantic Fleet.
12	5,553	30	e 4,200	32	e 1,498	.....	Excellent.....	Reserve, Charleston.
13	6,799	14.6	1,896	957	7,000	.....	Good.....	Atlantic Fleet.
14	4,750	22.5	1,720	36	b 1,062	54.5	Excellent.....	Reserve, Charleston.
15	6,709	{ f 9.07 b 8.06 }	c 250	.....	.....	.....	Very good.....	Atlantic Torp. Fleet.
16	19,379	14	67,500	12,500	.....	.....	89.32 per cent completed.	Wm. Cramp & Sons.
17	5,553	30	4,200	32	e 1,498	.....	Excellent.....	Reserve, Charleston.
18	4,763	23.41	1,750	40	.....	52.04	Good.....	Reserve, Mare Island.
19	17,768	28	e 8,000	174	e 2,500	201.26	.....do.....	Asiatic Torp. Fleet.
20	17,768	28.1	e 8,000	174	e 2,500	201.25	.....do.....	Do.
21	61,943	21	29,529	e 2,500	.....	.....	.....do.....	Atlantic Fleet.
22	7,575	25.52	e 3,000	72	e 1,680	e 80	Excellent.....	Reserve, Charleston.
23	13,200	16.75	6,202	675	e 6,925	e 405	Fair.....	Out com., Mare Island.
24	13,200	16.65	5,400	700	5,303	e 405	Very good.....	Special service.
25	10,978	13.71	5,227	308	2,976	400.31	Awaiting repairs..	Out com., Boston.
26	10,581	e 16	e 3,800	1,075	7,000	.....	Good.....	Atlantic Torp. Fleet tender.
27	8,162	15.5	2,255	265	3,180	e 410	Very good.....	Special service.
28	4,442	e 13.5	941	204	2,250	.....	Good.....	Naval Militia, Mich.
29	18,000	e 29.5	e 12,000	f 210	.....	.....	88.71 per cent completed.	Bath Iron Works.
30	4,159	12.9	1,220	246	.....	118.4	Good.....	Atlantic Fleet.
31	8,288	28.58	e 3,800	76	1,247	77.95	.....do.....	Naval Militia, N. C.
32	4,005	22.62	1,875	36	984	57.47	Excellent.....	Reserve, Charleston.

d And 60,816 gallons oil fuel.

e At 14 knots (estimated).

f Surface.

g Oil fuel.

Machinery data of United

	Name of vessel.	Type of vessel.	Displacement.	Type of engine.	Cylinder diameter.				Stroke.	Number and type of boilers.	Total grate surface.
					I. P.	I. P.	L. P.	Stroke.			
1	Farragut...	Torpedo boat.	Tons. 273	Vert. 3-exp. (2)..	In. 20	In. 29	In. a 30	In. 18	3 Thornycroft.	Sq. ft. 195	
2	Florida....	Battle ship....	21,825	Parsons turb. (4)					12 B. & W....	1,428	
3	Flusser.....	T. b. destroyer	700	Parsons turb.(3)					4 Normand....	347	
4	Foote.....	Torpedo boat.	142	Vert. 3-exp. (2)..	12	19½	a 22	16	2 Mosher.....	95	
5	Fox.....	.....do.....	132	.....do.....	11½	19	a 22½	15	2 Thornycroft.	88
6	Galveston...	Cruiser.....	3,100	.....do.....	18	29	a 35½	30	6 B. & W....	300
7	Gen. Alava.	Transport....	1,300	Vert. 3-exp. (1)..	17	27	45	30	1 S. E., auxy..	81.6	
8	Georgia....	Battle ship....	14,948	Vert. 3-exp. (2)..	35	57	a 66	48	24 Nielause...	1,432	
9	Glacier.....	Supply boat... ^b	7,000	Vert. 3-exp. (1)..	30	48	78	54	3 D. E., 1 auxy.	246	
10	Gloucester..	Conv. gunboat	750	.....do.....	21	33	54	30	2 B. & W....	100
11	Goldborough.	Torpedo boat.	247	Vert. 3-exp. (2)..	19½	31½	a 35½	29	3 Thornycroft.	216	
12	Grampus...	Submarine t. b.	130	Otto gasoline d.					None.....		
13	Grayling....	.....do.....		6-cyl. 4-cycle (2).	12			12	.....do.....	
14	Gwin.....	Torpedo boat.	46	Vert. 3-exp. (1)..	12½	18	25	13½	1 Normand....	38	
15	Hancock....	Conv. cruiser..		.....do.....	33½	56	92	65½	3 D. E., 2 S. E.	468
16	Hannibal...	Collier.....	4,291	.....do.....	20½	33	54	39	2 S. E.....	84
17	Hartford....	Cruiser.....	2,700	Hor. comp. (1).	35		66	48	4 S. E.....	186	
18	Hector.....	Collier.....	11,217	Vert. 3-exp. (2)..	22	37½	60	42	.....do.....	234.68
19	Helena.....	Gunboat.....	1,392	.....do.....	14½	22	33½	18	4 Hohenstein..	152.4
20	Holland....	Submarine t. b.	74	Otto gasoline d.					None.....		
21	Hopkins....	T. b. destroyer	467	Vert. 3-exp. (2)..	22	32½	a 34	18	4 Thornycroft.	294	
22	Hull.....	.....do.....	449	.....do.....	22	32½	a 34	18	.....do.....	294
23	Idaho.....	Battle ship....	13,000	.....do.....	25½	42	69	48	8 B. & W....	768
24	Illinois....	.....do.....	11,565	.....do.....	33½	51	78	48	8 S. E.....	685
25	Indiana....	.....do.....	10,288	.....do.....	34½	48	75	42	8 B. & W....	616
26	Iowa.....	.....do.....	11,340	.....do.....	39	55	85	48	3 D. E., 2 S. E.	756
27	Iris.....	Supply and repair ship.	6,100	Vert. comp. (1).	31		70	48	2 D. E., 1 auxy	154	
28	Isla de Cuba	Gunboat.....	1,125	Hor. 3-exp. (2)..	18½	29	43	24	2 S. W.....	148	
29	Isla de Luzon.	.....do.....	1,125	.....do.....	18½	29	43	24	.....do.....	148.5
30	Jupiter....	Collier.....		Vert. 3-exp. (2)..	27½	46	76	48	3 D. E.....	450	
31	Justin.....	.....do.....	3,300	Vert. 3-exp. (1)..	21	35	57½	39	2 S. E.....	72.5
32	Kansas....	Battle ship....	16,000	Vert. 3-exp. (2)..	32½	53	a 61	48	12 B. & W....	1,098	
33	Kearsarge..	.....do.....	11,525	.....do.....	33½	51	78	48	3 D. E., 2 S. E.	685

^a Two low-pressure cylinders.^b Estimated.^c And 400 tons oil fuel.

States naval vessels—Continued.

	Total heating surface.	Trial speed.	Total maximum I. H. P.	Total bunker capacity.	Coal endurance at 10 knots per hour.	Total weight of machinery.	Present condition of machinery as per last report.	Present service.
	Sq. ft.	Knots.	Tons.	Knots.	Tons.			
1	9,912	30.13	5,600	76	2,250	108.31	Very good.....	Reserve, Mare Island.
2	64,234	20.75	28,000	2,500			66.59 per cent completed.	Navy-Yard, N. Y.
3	16,177	30.41	11,842	295		227.2	Good.....	Atlantic Torpedo Fleet.
4	5,260	24.53	2,000	44	1,235	50.82	Excellent.....	Naval Militia, Mass.
5	4,763	23.13	1,750	40		51.92	Good.....	Out com., Mare Island.
6	13,200	16.41	5,178	700	6,925	405	Fair.....	Out com., Puget Sound.
7	1,655	10	770	240	2,200		Good.....	Out com., Cavite.
8	57,225	19.26	25,463	1,967	3,800	1,791	Excellent.....	Atlantic Fleet.
9	7,310	12.3	1,650	917	5,680		Fair.....	Pacific Fleet.
10	3,100	17	2,000	120	1,150		Good.....	Naval Militia, N. Y.
11	13,500	27.4	5,850	89		1,320	Fair.....	Pacific Torpedo Fleet.
12		{ 8.45 7.3 }	160	7,850			Good.....	Do.
13		4.13	4,600	7,600			do.....	Atlantic Torpedo Fleet.
14	1,870	20.88	850	9	500	15.6	do.....	Torpedo Sta., Newport.
15	14,578		4,000	2,428			do.....	Reevg. ship, New York.
16	3,109	10	1,100	480	4,500		do.....	Special service.
17	6,340	12	2,000	262		290	do.....	Naval Academy.
18	10,200	12.87	3,921	818		734.7	do.....	Special service.
19	5,002	15.5	1,988	300	2,300	185.18	do.....	Asiatic Fleet.
20		8	50				do.....	Out com., Norfolk.
21	17,612	29.02	8,456	143	1,317	205.7	Fair.....	Pacific Torpedo Fleet.
22	17,612	28.03	9,119	143		189	Good.....	Do.
23	31,760	17.14	14,299	1,841		979	do.....	Atlantic Fleet.
24	21,649	17.45	12,890	1,297	4,250	1,278.77	Under repair.....	Out com., Philadelphia.
25	10,194	15.55	9,738	1,550	4,600	1,241.85	Very good.....	Nav. Acad., Prac. Squadron.
26	24,082	17.00	12,105	1,650	4,500	1,292.87	Good.....	Do.
27	4,918	10.5	1,300	300	10,000		Very good.....	Tender, Pacific Torpedo Fleet.
28	5,508	13.08	800	159	1,920		Good.....	Naval Militia, Md.
29	5,508	11.23	800	159	1,920		do.....	Naval Militia, La.
30	19,379							Authorized by act of May 13, 1908.
31	3,196	10.9	1,450	167	2,010		Good.....	Special service.
32	52,752	18.09	19,757	2,388			Very good.....	Atlantic Fleet.
33	31,760	16.8	11,954	1,573	5,316	1,195	Fair.....	Out com., Philadelphia.

♦ Surface.

• Submerged.

/ Gallons gasoline.

Machinery data of United

	Name of vessel.	Type of vessel.	Displacement.	Type of engine.	Cylinder diameter.			Stroke.	Number and type of boilers.	Total grate surface.
					H. P.	I. P.	L. P.			
1	Kentucky..	Battleship....	Tons. 11,525	Vert. 3-exp. (2)..	35½	51	78	48	3 D. E., 2 S. E.	Sq. ft. 685
2	Lanson....	T. b. destroyer.	700	Parsons turb. (3)					4 Mosher.....	368
3	Lawrence....	.....do.....	412	Vert. 3-exp. (2)..	22	31	a 34	20	4 Fore River..	304
4	Lebanon....	Collier.....	3,375	Vert. 3-exp. (1)..	19	30	50	30	2 S. E.....	126.8
5	Leonidas....	.....do.....	4,242	.....do.....	20½	33	54	30	2 S. E., 1 auxy.	84
6	Louisiana....	Battle ship....	16,055	Vert. 3-exp. (2)..	32½	53	a 61	48	12 B. & W.....	1,097
7	Maadonough.	T. b. destroyer.	405	.....do.....	22	31	a 34	24	4 Fore River..	304
8	Machias....	Gunboat.....	1,177	.....do.....	15½	22½	35½	24	2 S. W.....	105.5
9	Mackenzie..	Torpedo boat..	65	Vert. 3-exp. (1)..	12	19½	a 22	16	2 Thornycroft.	40
10	Maine.....	Battle ship....	12,500	Vert. 3-exp. (2)..	38½	59	92	42	24 Niclausse..	1,353
11	Manila.....	Frtson ship....	1,800	Compound (1)..	32		61	39	2 S. E., 1 auxy.	117
12	Manly.....	Torpedo boat..	30	Vert. 3-exp. (1)..	8	12	17½	10	1 Yarrow.....	12.5
13	Marblehead	Cruiser.....	2,080	Vert. 3-exp. (2)..	26½	39	63	26	3 D. E., 2 S. E.	414
14	Marcellus...	Collier.....	4,400	Vert. comp. (1)..	38		66	42	2 S. E.....	111
15	Marietta....	Comp. gun-boat.	1,000	Vert. 3-exp. (2)..	12	18	28	18	2 B. & W.....	98
16	Mars.....	Collier.....	11,202	.....do.....	22	37½	60	42	4 S. E.....	234.68
17	Maryland....	Arm. cruiser..	13,680	.....do.....	38½	63½	a 74	48	16 B. & W.....	1,600
18	Massachusetts.	Battle ship....	10,258	.....do.....	34½	48	75	42	8 B. & W.....	567
19	Mayflower..	Conv. cruiser..	2,600	.....do.....	22½	38	a 40	27	2 S. E., 1 auxy.	213
20	Mayrant....	T. b. destroyer.	b 742	Zoelly turb. (2)					4 White Forster.	(c)
21	McCall.....	.....do.....	b 742	Parsons turb. (3)					4 Thornycroft.	(c)
22	McKee.....	Torpedo boat..	65	Vert. 3-exp. (1)..	12	19½	a 22	16	2 Thornycroft.	40
23	Miantonomoh.	Monitor.....	3,990	Incl. comp. (2)..	32		48	42	6 S. E.....	369
24	Michigan....	Battle ship....	16,000	Vert. 3-exp. (2)..	32	52	a 72	48	12 B. & W.....	1,050
25	Milwaukee..	Prot. cruiser..	9,700	.....do.....	30	59½	a 69	45	16 B. & W.....	1,400
26	Minneapolis	.....do.....	7,375	Vert. 3-exp. (3)..	42	59	92	42	8 D. E., 2 S. E.	1,520.2
27	Minnesota..	Battle ship....	16,000	Vert. 3-exp. (2)..	32½	53	a 61	48	12 B. & W.....	1,100
28	Mississippi.	.....do.....	13,000	.....do.....	25½	42	69	48	8 B. & W.....	768
29	Missouri....	.....do.....	12,500	.....do.....	34½	53	a 63	48	12 Thornycroft	972
30	Moccasin....	Submarine t. b.	122	Otto gasoline d					None.....	
31	Mohican....	Cruiser.....	1,900	Hor. comp. (1)..	42		64	42	4 S. E.....	128
32	Monadnock..	Monitor.....	3,900	Hor. 3-exp. (2)..	19½	30½	52½	30	.....do.....	200
33	Monaghan..	T. b. destroyer.	b 742	Parsons turb. (3)					4 Thornycroft.	(c)
34	Montana....	Arm. cruiser..	14,500	Vert. 3-exp. (2)..	38½	63½	a 74	48	16 B. & W.....	1,590
35	Monterey...	Monitor.....	4,684	.....do.....	27	41	64	30	4 B. & W.....	253
36	Montgomery	Cruiser.....	2,080	.....do.....	26½	39	63	26	3 D. E., 2 S. E.	368.4
37	Morris.....	Torpedo boat..	105	.....do.....	12½	18	25	13½	2 mod. Normand.	80

a Two low-pressure cylinders.

b Estimated.

c Oil fuel.

States naval vessels—Continued.

	Total heating surfaces.	Trial speed.	Total maximum I. H. P.	Total bunker capacity.	Coal endurance at 10 knots per hour.	Total weight of machinery.	Present condition of machinery as per last report.	Present service.
	<i>Sq. ft.</i>	<i>Knots.</i>	<i>Tons.</i>	<i>Knots.</i>	<i>Tons.</i>			
1	22,104	16.9	12,318	1,591	5,360	1,197	Very good.....	Out com., Norfolk.
2	17,500	28.6	11,041	285	.....	.....	.....do.....	Atlantic Torpedo Fleet.
3	18,117	28.5	b 8,400	108	.....	b 189	Excellent.....	Pacific Torpedo Fleet.
4	3,203	12.5	b 2,200	188	.....	.....	Good.....	Atlantic Fleet.
5	3,109	b 9.5	1,100	200	5,000	.....	.....do.....	Special service.
6	52,752	18.82	21,350	2,452	5,000	1,577	Very good.....	Atlantic Fleet.
7	18,117	28.03	b 8,400	108	b 1,920	b 189	.....do.....	Reserve Torpedo Division.
8	3,954	15.46	1,873	261	4,500	143.7	Good.....	Naval Militia, Conn.
9	2,168	20.11	1,192	15	720	26.6	Excellent (boiler bad).	Reserve, Charlestown.
10	88,104	18	15,841	1,875	.....	1,569.03	Under repair.....	Out com., Portsmouth.
11	3,191	b 11	800	180	2,160	.....	Bad.....	Mare Island Yard.
12	500	17	250	2	.....	.....	Good.....	Naval Academy.
13	11,058	18.44	5,450	340	2,900	429	.....do.....	Out com., Mare Island.
14	3,680	b 11	1,200	225	.....	.....	.....do.....	Special service.
15	3,664	13.02	1,054	220	3,700	110.15	.....do.....	Do.
16	10,200	12.65	3,818	818	3,500	734.7	.....do.....	Do.
17	70,944	22.41	28,474	1,950	.....	.....	.....do.....	Pacific Fleet.
18	24,500	16.21	10,403	1,560	4,500	1,062	Excellent.....	Nav. Acad. Practice Squadron.
19	6,600	16.75	4,600	525	3,500	.....	Good.....	Special service.
20	18,000	b 30	b 12,000	c 210	.....	.....	74.44 per cent completed.	Wm. Cramp & Sons S. & E. B. Co.
21	19,200	b 29.5	b 12,000	c 210	.....	.....	83.23 per cent completed.	New York S. B. Co.
22	2,294	19.82	850	.....	720	22.08	Good.....	Torpedo Sta., Newport.
23	8,781	10	1,420	250	1,200	509.77	Fair.....	Out com., Philadelphia.
24	47,220	18.79	16,517	b 2,200	.....	1,555	Excellent.....	Atlantic Fleet.
25	64,000	22.22	24,504	1,650	.....	1,890	.....do.....	Out com., Puget Sound.
26	50,147	23.07	20,862	1,400	6,300	1,672	Under repairs.....	Out com., Philadelphia.
27	52,732	18.85	20,572	2,364	.....	1,688	Very good.....	Atlantic Fleet.
28	32,640	17.11	13,900	1,841	.....	994	.....do.....	Do.
29	51,372	18.15	16,277	1,887	.....	1,323	.....do.....	Reserve, Boston.
30	.....	{ d 8.42 e 7.24	160	f 850	.....	.....	Excellent.....	Asiatic Torpedo Fleet.
31	3,284	.....	b 1,150	168	.....	.....	Boilers fair, engines removed.	Tender, Asiatic Torp. Fleet.
32	6,242	11.63	2,163	386	2,600	292.8	Fair.....	Out com., Cavite.
33	18,000	b 29.5	12,000	6,210	.....	.....	33.5 per cent completed.	Newport News S. B. Co.
34	68,000	22.26	28,280	2,113	7,300	2,097.76	Very good.....	Special service squadron.
35	9,500	13.6	5,244	206	1,430	451.92	.....do.....	Asiatic Fleet.
36	10,978	19.06	5,584	265	1,831	401.27	Good.....	Atlantic Fleet.
37	4,004	24	1,750	26	b 1,500	32.39	.....do.....	Torpedo Sta., Newport.

d Surface.

e Submerged.

f Gallons gasoline.

Machinery data of United

	Name of vessel.	Type of vessel.	Displacement.	Type of engine.	Cylinder diameter.			Stroke.	Number and type of boilers.	Total grate surface.
					H. P.	I. P.	L. P.			
1	Nanshan...	Collier.....	Tons. 4,827	Vert. 3-exp. (1)..	In. 23	In. 38	In. 61	In. 42	2 S. E., 1 auxy.	Sq. ft. 120
2	Narwhal...	Submarine t. b.		6 cyl. 4 cycle (2) a.	12			12	None.....	
3	Nashville...	Gunboat.....	1,719	Vert. 4-exp. (2)..	11	$\left\{ \begin{array}{l} 17 \\ 24 \end{array} \right\}$	34	18	6 Mosher.....	159
4	Nebraska...	Battle ship....	14,948	Vert. 3-exp. (2)..	35	57	c66	48	12 B. & W....	1,342
5	Neptune...	Collier.....	419,360	Westinghouse turb.					3 D. E., 1 auxy.	
6	Nero.....	.....do.....	4,925	Vert. 3-exp. (1)..	23	37 $\frac{1}{2}$	61 $\frac{1}{2}$	39	2 S. E., 1 auxy.	90
7	Newark...	Prot. cruiser...	4,098	Hor. 3-exp. (2)..	34 $\frac{1}{2}$	52 $\frac{1}{2}$	76 $\frac{1}{2}$	40	4 D. E.....	540
8	New Hampshire.	Battle ship....	16,000	Vert. 3-exp. (2)..	32 $\frac{1}{2}$	53	c61	48	12 B. & W....	1,100
9	New Jersey.....	.....do.....	14,948	.....do.....	35	57	c66	48	.....do.....	1,342
10	New Orleans	Prot. cruiser...	3,769	.....do.....	31	46	70	30	4 D. E., 1 auxy.	480
11	Newport....	Comp. gunbt..	1,090	Vert. 3-exp. (1)..	15 $\frac{1}{2}$	23 $\frac{1}{2}$	30	30	2 S. E.....	78
12	New York...	Arm. cruiser...	8,200	4 vert. 3-exp. (2).	32	47	72	42	12 B. & W....	1,020
13	North Carolina.	.....do.....	14,500	Vert. 3-exp. (2)..	38 $\frac{1}{2}$	63 $\frac{1}{2}$	c74	48	16 B. & W....	1,590
14	North Dakota.	Battle ship....	20,000	Curtis turbs. (2).					14 B. & W....	1,439
15	Octopus...	Submarine t. b.	273	Explosion motors a.					None.....	
16	Ohio.....	Battle ship....	12,500	Vert. 3-exp. (2)..	35 $\frac{1}{2}$	53	c63	48	12 Thornycroft	924
17	Olympia...	Prot. cruiser...	5,870	.....do.....	42	59	92	42	4 D. E., 2 S. E.	824
18	Oregon.....	Battle ship....	10,242	.....do.....	34 $\frac{1}{2}$	48	75	42	4 D. E.....	552
19	Ozark.....	Monitor.....	3,235	.....do.....	17	26 $\frac{1}{2}$	40	24	4 Thornycroft	198
20	Paducah...	Gunboat.....	1,000	.....do.....	9	15 $\frac{1}{2}$	25 $\frac{1}{2}$	21	2 B. & W....	100
21	Panther...	Repair ship...	4,260	Vert. 3-exp. (1)..	25 $\frac{1}{2}$	41	67 $\frac{1}{2}$	42	4 S. E.....	234
22	Patterson...	T. b. destroyer.	4,742	Parsons turb. (3).					4 White-Foster	(f)
23	Paulding.....	.....do.....	4,742	.....do.....					4 Normand...	(f)
24	Paul Jones.....	.....do.....	476	Vert. 3-exp. (2)..	20 $\frac{1}{2}$	32	c38	22	4 Thornycroft	315
25	Pennsylvania.	Arm. cruiser...	13,080	.....do.....	38 $\frac{1}{2}$	63 $\frac{1}{2}$	c74	48	32 Nielauss...	1,600
26	Perkins.....	T. b. destroyer.	4,742	Curtis turbs. (2).					4 Yarrow.....	(f)
27	Perry.....	.....do.....	476	.....do.....	20 $\frac{1}{2}$	32	c38	22	4 Thornycroft	315
28	Petrel.....	Gunboat.....	892	Hor. comp. (1)..	25		46	33	4 S. E.....	93.2
29	Philadelphia	Prot. cruiser...	4,410	Hor. 3-exp. (2)..	38	58	86	40	4 D. E.....	624
30	Pickrel...	Submarine t. b.		6-cyl. 4-cycle (2).	12 $\frac{1}{2}$			13 $\frac{1}{2}$	None.....	
31	Pike.....	.....do.....	120	Otto gasoline a.					.....do.....	

a Surface.

b Gallons gasoline.

c Two low-pressure cylinders.

States naval vessels—Continued.

	Total heating surface.	Trial speed.	Total maximum I. H. P.	Total bunker capacity.	Coal endurance at 10 knots per hour.	Total weight of machinery.	Present condition of machinery as per last report.	Present service.
	Sq. ft.	Knots.	Tons.	Tons.	Knots.	Tons.		
1	3,365	11.2	1,400	400	4,224		Good.....	Special service.
2	.....	13	600	6,000			.....do.....	Atlantic Torpedo Fleet.
3	6,156	16.3	2,536	363	3,400	170.74	.....do.....	Naval militia, Illinois.
4	56,385	19.06	21,911	1,923		1,689	.....do.....	Atlantic Fleet.
5	.....	14	7,500	2,000			11.35 per cent completed.	Maryland Steel Co.
6	4,800	19	1,000	300	4,500		Fair.....	Out com., New York.
7	16,736	19	8,868	800	4,440	653	.....do.....	Station ship, Guantanamo.
8	47,112	18.16	17,267	2,425		1,551.65	Excellent.....	Atlantic Fleet.
9	56,184	19.18	23,570	1,944		1,735	Fair.....	Reserve, Boston.
10	14,378	20	7,500	750	4,400		Very good.....	Asiatic Fleet.
11	2,524	12.29	1,009	224	3,500	109.69	Excellent.....	State school ship, N. Y.
12	40,908	21	17,401	1,325	4,800	1,311.3	Good.....	Flag ship, Asiatic Fleet.
13	68,000	21.91	27,274	2,113		2,092	Very good.....	Special service squadron.
14	61,943	21.66	32,307	2,500			Excellent.....	Atlantic Fleet.
15	.....	{ 11.02 10.00 }	210				.....	Special service.
16	60,130	17.82	16,507	2,215		1,130	Fair.....	Out com., New York.
17	28,299	21.68	17,313	1,075	4,200	1,162.56	Good.....	Naval Academy.
18	16,832	16.79	11,111	1,450	5,300	1,009.23	Under repairs.....	Out com., Puget Sound.
19	9,370	12.71	1,830	344		256.25	Good.....	Naval militia, D. C.
20	4,200	12.82	1,268	246	2,808	1,113	.....do.....	Special service.
21	6,960	13	3,200	675	4,800		.....do.....	Atlantic Fleet.
22	18,000	29.5	12,000	210			41.64 per cent completed.	Wm. Cramp & Sons.
23	18,000	29.5	12,000	210			91.69 per cent completed.	Bath Iron Works.
24	17,783	28.91	8,000	168	1,984	201.25	Excellent.....	Pacific Torpedo Fleet.
25	68,308	22.44	29,071	1,825		2,162.7	Good.....	Pacific Fleet.
26	18,000	29.5	12,000	210			79.77 per cent completed.	Fore River S. B. Co.
27	17,763	28.32	7,950	168		200.67	Excellent.....	Pacific Torpedo Fleet.
28	2,505	11.55	1,045	193	3,200	112.5	Very good.....	Special service.
29	20,457	19.68	8,815	525	5,400	705.36	Good.....	Reevg. ship, Puget Sound.
30	.....	{ 14 11.25 }	780	{ 11,060 (b) }			{ 47.52 per cent completed.	Moran Works.
31	.....	{ 8.51 7.18 }	160	850			Excellent.....	In com., Mare Island.

d Estimated.

e Submerged.

/ Oil fuel.

Machinery data of United

	Name of vessel.	Type of vessel.	Displacement.	Type of engine.	Cylinder diameter.				Number and type of boilers.	Total grate surface.
					H. P.	I. P.	L. P.	Stroke.		
			Tons.		In.	In.	In.	In.		Sq. ft.
1	Plunger	Submarine t. b.	120	Otto gasoline a					None	
2	Pompey	Collier	3,085	Vert. 3-exp. (1)	19½	31½	51	32	1 S. E., 1 auxy.	74
3	Porpoise	Submarine t. b.	130	Otto gasoline a					None	
4	Porter	Torpedo boat	165	Vert. 3-exp. (2)	16	23½	25	16	3 mod. Normand.	156
5	Prarie	Conv. cruiser	6,872	Vert. 3-exp. (1)	32	52	84	54	3 D. E., 1 auxy	447
6	Preble	T. b. destroyer	475	Vert. 3-exp. (2)	20½	32	28	22	4 Thornycroft.	315
7	Preston	do.	700	Parsons turb. (3)					do.	333
8	Princeton	Comp. gunboat	1,000	Vert. 3-exp. (1)	15½	23½	36	30	2 S. E.	78
9	Prometheus	Fleet collier	12,500	Vert. 3-exp. (2)	28	44½	75	54	6 B. & W.	493
10	Puritan	Monitor	6,060	Hor. comp. (2)	50		86	42	8 S. E.	566
11	Rainbow	Distilling ship	6,200	Vert. 3-exp. (1)	28	44	72	48	2 D. E.	246
12	Raleigh	Prot. cruiser	3,213	Vert. 3-exp. (2)	24	44½	57	33	8 B. & W.	506
13	Ranger	Cruiser	1,020	Hor. comp. (1)	28		42	42	4 S. E.	120
14	Reld	T. b. destroyer	700	Parsons turb. (3)					4 Normand.	347
15	Relief	Hospital ship	3,000	Vert. 3-exp. (1)	30	48	75	54	6 S. E.	447.7
16	Rhode Island	Battle ship	14,680	Vert. 3-exp. (2)	35	57	66	48	12 B. & W.	1,342
17	Rodgers	Torpedo boat	142	do.	12	19½	22	16	2 Mosher	95
18	Roe	T. b. destroyer	742	Parsons turb. (3)					4 Thornycroft.	(f)
19	Rowan	Torpedo boat	182	Vert. 3-exp. (2)	14½	23	25½	18	3 Mosher	143.4
20	Salem	Scout	3,750	Curtis turb. (2)					12 Fore River	606
21	Salmon	Submarine t. b.		6 cyl. 4 cycle (2)	12			12	None	
22	San Francisco	Prot. cruiser	4,098	Hor. 3-exp. (2)	42	60	90	36	8 B. & W. e	690
23	Saturn	Collier	6,230	Vert. 3-exp. (1)	22	32	52	48	4 S. E., 1 auxy.	203
24	Scorpion	Conv. gunboat	850	do.	15	24	39	21	4 Yarrow	159.4
25	Seal	Lake subm. t. b.	500							
26	Severn	Steel training ship	1,325							
27	Shark	Submarine t. b.	120	Otto gasoline a					None	
28	Shubrick	Torpedo boat	189	Vert. 3-exp. (2)	14	22	25½	18	3 Thornycroft.	137
29	Skate	Submarine t. b.		6 cyl. 4 cycle (2)	12½			13½	None	
30	Skipjack	do.			12½			13½	None	

a Surface.

b Submerged.

c Estimated.

States naval vessels—Continued.

	Total heating surface.	Trial speed.	Total maximum I. H. P.	Total bunker capacity.	Coal endurance at 10 knots per hour.	Total weight of machinery.	Present condition of machinery as per last report.	Present service.
	Sq. ft.		Knots.	Tons.	Knots.	Tons.		
1	.....	{ a 8.88 b 7.26	c 160	d 850	.....	.....	Good.....	Reserve, Charleston.
2	2,672	10.5	.....	200	e 1,535	.....	Very good.....	Special service.
3	.....	{ a 8.4 b 7.1	b 160	d 850	.....	.....	Excellent.....	Asiatic Torpedo Fleet.
4	8,288	28.63	c 3,500	76	1,190	77.95	Under repair.....	Reserve, Charleston.
5	10,506	c 14.5	c 3,800	1,300	8,400	.....	Good.....	Special service.
6	7,782	28.08	7,370	168	.....	201.23	Excellent.....	Pacific Torpedo Fleet.
7	15,200	29.18	11,356	270	.....	.....	Excellent; boilers fair.	Atlantic Torpedo Fleet.
8	2,524	10.63	923	226	3,360	104.46	Good.....	Puget Sound yard.
9	19,974	c 16	c 7,500	c 1,576	.....	c 1,125	.....do.....	Special service.
10	13,280	12.4	3,700	306	1,140	.....	.....do.....	Naval Militia, D. C.
11	6,419	c 12	c 1,800	1,139	4,872	.....	.....do.....	Asiatic Fleet.
12	21,130	c 20	c 8,500	575	c 4,560	783.4	.....do.....	Out com., Mare Island.
13	2,945	10	c 500	178	.....	.....	.....do.....	State school-ship, Mass.
14	16,177	31.82	12,734	295	.....	227.2	Very good.....	Atlantic Torpedo Fleet.
15	.....	.....	2,666	607	.....	.....	Fair.....	Out com., Olongapo.
16	56,184	19.01	20,627	1,974	.....	1,764.5	Good.....	Atlantic Fleet.
17	5,200	24.49	2,411	44	1,200	50.82	Excellent.....	Naval Militia, Mass.
18	18,000	c 29.5	c 12,000	/ 210	.....	.....	92.4 per cent completed.	Newport News S. B. Co.
19	7,890	27.07	3,200	63	1,800	82.71	Good.....	Pacific Torpedo Fleet.
20	37,992	24.72	17,409	1,400	.....	880	.....do.....	Special service.
21	.....	a 13	a 600	d 6,000	.....	.....	96.23 per cent completed.	Fore River S. B. Co.
22	c 27,000	19.52	9,913	625	4,000	914	Under repair.....	Out com., Norfolk.
23	5,389	11	1,500	335	5,152	.....	Good.....	Special service.
24	8,384	17.85	2,800	133	2,000	.....	.....do.....	Special service, Constantinople.
25	.....	{ a 14 b 9.5	.....	.....	.....	.....	{ 28.6 per cent completed.	} Newport News S. B. Co.
26	43	Good.....		Tender 3d. Subm'n Division.
27	.....	{ a 8.27 b 7.28	c 160	d 850	.....	.....	.....do.....	Asiatic Torpedo Fleet.
28	7,548	26.07	3,000	82	2,240	c 80	Excellent.....	Reserve, Charleston.
29	.....	{ a 14 b 11.25	a 780	d 11,050	.....	.....	{ 47.52 per cent completed.	} Moran Works.
30	{ a 14 b 11.25	a 780	d 11,050	{ 35.07 per cent completed.		} Fore River S. B. Co.

d Gallons gasoline.

e Two low-pressure cylinders.

f Oil fuel.

g Proposed.

Machinery data of United

	Name of vessel.	Type of vessel.	Displacement.	Type of engine.	Cylinder diameter.			Stroke.	Number and type of boilers.	Total grate surface.
					H. P.	I. P.	L. P.			
			Tons.		In.	In.	In.	In.		Sq. ft.
1	Smith.....	T. b. destroyer.	700	Parsons turb. (3).					4 Mosher.....	368
2	Snapper....	Submarine t. b.		6 cyl. 4 cycle (2)..	12			12	None.....	
3	Solace.....	Torp. supply ship.	4,700	Vert. 3-exp. (1)..	28	44	74	54	3 D. E., 1 auxy.	388
4	Somers.....	Torpedo boat.	145	Vert. 4-exp. (1)..	17	$\frac{24}{33\frac{1}{2}}$	42 $\frac{1}{2}$	18 $\frac{1}{2}$	1 locomotive..	47
5	South Carolina.	Battle ship....	16,000	Vert. 3-exp. (2)..	32	52	d 72	48	12 B. & W....	1,050
6	South Dakota.	Arm. cruiser..	13,680	do.....	38 $\frac{1}{2}$	63 $\frac{1}{2}$	d 74	48	16 B. & W....	1,000
7	Southbery...	Prison ship....	3,100	Vert. 3-exp. (1)..	21	35	57 $\frac{1}{2}$	39	2 S. E., 1 auxy.	108
8	Sterling....	Collier.....	5,663	Vert. 3-exp. (1)..	22 $\frac{1}{2}$	32	55 $\frac{1}{2}$	42	1 S. E., 1 auxy.	77.2
9	Sterett.....	T. b. destroyer.	c 742	Curtis turb. (2)..					4 Yarrow.....	(c)
10	Stewart.....	do.....	439	Vert. 3-exp. (2)..	20 $\frac{1}{2}$	32	d 38	22	4 Seabury....	315
11	Stiletto....	Torpedo boat.	31	Vert. comp. (1)..	12		21	12	1 Almy.....	29
12	Stingray....	Submarine t. b.		6 cyl. 4 cycle (2)..	12			12	None.....	
13	St. Louis...	Prot. cruiser..	9,700	Vert. 3-exp. (2)..	36	59 $\frac{1}{2}$	d 69	45	16 B. & W....	1,400
14	Stockton...	Torpedo boat.	197	do.....	14	22	d 25 $\frac{1}{2}$	18	3 Thornycroft.	137
15	Stringham..	do.....	340	do.....	22	32 $\frac{1}{2}$	d 34	18	4 Thornycroft.	252
16	Sturgeon...	Submarine t. b.		6 cyl. 4 cycle (2)..	12 $\frac{1}{2}$			13 $\frac{1}{2}$	None.....	
17	Supply.....	Conv. cruiser..	4,466	Vert. 3-exp. (1)..	23	36	60	36	1 D. E., 2 auxy.	114
18	Tacoma....	Cruiser.....	3,100	Vert. 3-exp. (2)..	18	29	d 35 $\frac{1}{2}$	30	6 B. & W....	300
19	Talbot.....	Torpedo boat.	46	Vert. 3-exp. (1)..	12 $\frac{1}{2}$	18	25	13 $\frac{1}{2}$	1 Normand....	38
20	Tallahassee.	Monitor.....	3,225	do.....	17	26 $\frac{1}{2}$	40	24	4 Mosher.....	240
21	Tarantula...	Submarine t. b.	170	{Explosion motor, a					None.....	
22	Tarpon.....	do.....		6 cyl. 4 cycle (2)..	12			12	do.....	
23	Tennessee..	Arm. cruiser..	14,500	Vert. 3-exp. (2)..	38 $\frac{1}{2}$	63 $\frac{1}{2}$	d 74 $\frac{1}{2}$	48	16 B. & W....	1,050
24	Terror.....	Monitor.....	3,990	Incl. comp. (2)..	32		48	46	6 S. E.....	378
25	Terry.....	T. b. destroyer.	c 742	Parsons turbs (3)					4 Thornycroft.	(f)
26	Texas.....	Battle ship....	6,315	Vert. 3-exp. (2)..	36	51	78	39	4 D. E.....	531.6
27	Thornton...	Torpedo boat.	193	do.....	14	22	d 25 $\frac{1}{2}$	18	3 Thornycroft.	137
28	Thrasher...	Submarine t. b.		{4 sets, 6 cyl., 4 cycle (2)..					None.....	
29	Tingey.....	Torpedo boat.	190	Vert. 3-exp. (2)..	14	22	d 25 $\frac{1}{2}$	18	3 Thornycroft.	137
30	Tonopah...	Monitor.....	3,218	do.....	17	26 $\frac{1}{2}$	40	24	4 Niclausse...	220
31	Topeka.....	Prison ship....	2,372	Hor. comp. (2)..	35 $\frac{1}{2}$		58	36	2 D. E., 2 S. E.	273

a Surface.

b Gallons gasoline.

c Estimated.

States naval vessels—Continued.

	Total heating surface.	Trial speed.	Total maximum I. H. P.	Total bunker capacity.	Coal endurance at 10 knots per hour.	Total weight of machinery.	Present condition of machinery as per last report.	Present service.
1	Sq. ft. 17,500	Knots. 28.35	10,362	Tons. 285			Good.....	Atlantic Torpedo Fleet.
2	.....	a 10.78	a 500	b 3,900	.....	.....	.....do.....	Do.
3	10,910	c 15	c 3,200	1,000	7,000	.....	.....do.....	Atlantic Fleet.
4	2,242	c 17.5	c 1,900	37	.....	.....	.....do.....	Naval Militia, Md.
5	46,750	18.86	18,357	c 2,200	.....	1,504	Excellent.....	Atlantic Fleet.
6	70,928	22.24	28,843	2,075	6,840	.....	Very good.....	Special service.
7	972	e 11	.....	380	5,500	.....	Fair.....	Portsmouth yard.
8	3,466	e 11	c 1,000	469	7,000	.....	.....do.....	Out com., Portsmouth.
9	18,000	e 29.5	e 12,000	f 210	.....	.....	71.07 per cent completed.	Fore River S. B. Co.
10	17,752	29.7	e 8,000	172	.....	204.65	Excellent.....	Pacific Torpedo Fleet.
11	1,100	18.22	359	4	168	10.95	Good.....	Torpedo Sta., Newport.
12	.....	a 10.5	a 500	b 3,900	.....	.....	.....do.....	Atlantic Torpedo Fleet.
13	64,000	22.13	27,484	1,650	.....	1,812.6	Excellent.....	Out com., Puget Sound.
14	7,548	25.79	3,000	79	1,680	88.64	.....do.....	Reserve, Charleston.
15	16,020	25.33	e 7,200	95	.....	.....	.....do.....	Reserve, Torpedo Division.
16	.....	{ a 14 e 11.25 }	e 780	b 11,050	.....	.....	{ 35.07 per cent completed.	} Fore River S. B. Co.
17	3,827	.....	1,000	1,020	8,160	.....	Good.....	Station ship, Guam.
18	13,200	16.58	5,424	675	.....	438.4	Excellent.....	Special service.
19	1,870	21.15	850	8	.....	15.56	Good.....	Torpedo Sta., Newport.
20	9,460	12.4	2,395	355	e 1,680	226.38	.....do.....	Exp'l purposes, Washington.
21	.....	{ a 9.44 e 8 }	e 250	b 1,850	.....	.....	Fair.....	Atlantic Torpedo Fleet.
22	.....	a 10.5	a 500	b 3,900	.....	.....	Good.....	Do.
23	70,940	22.16	27,430	1,975	5,423	2,020.2	.....do.....	Special service squadron.
24	8,781	c 12	1,600	276	1,300	456.88	Fair.....	Out com., Philadelphia.
25	18,900	e 29.5	e 12,000	f 210	.....	.....	80.1 per cent completed.	Newport News S. B. Co.
26	16,912	17.8	8,610	850	2,900	662.64	Fair.....	Recvg. ship, Charleston, S. C.
27	7,548	24.55	3,000	85	.....	88.64	Good.....	Reserve, Charleston.
28	.....	{ a 14 e 9.5 }	e 1,000	.....	.....	.....	{ 2.43 per cent completed.	} Wm. Cramp & Sons S. & E. B. Co.
29	7,548	24.91	3,000	75	.....	e 80	Fair.....	Reserve, Charleston.
30	8,879	13.04	2,004	335	d 1,680	274.91	Good.....	Naval Militia, N. J.
31	8,462	e 16	e 2,200	394	3,800	.....	Removed.....	Portsmouth yard; aux. to Southern.

d Two low-pressure cylinders.

e Submerged.

f Oil fuel.

Machinery data of United

	Name of vessel.	Type of vessel.	Displacement.	Type of engine.	Cylinder diameter.				Number and type of boilers.	Total grate surface.
					H. P.	I. P.	L. P.	Stroke.		
			Tons.		In.	In.	In.	In.		Sq. ft.
1	Trippe.....	T. b. destroyer.	a 742	Parsons (3).....					4 Normand....	(b)
2	Truxtun.....	do.....	486	Vert. 3-exp. (2) ..	23	34	e 37	20	4 Thornycroft.	300
3	Tuna.....	Submarine t. b.		{4 sets, 4 cyl., 4 cycle (2).}					None.....	
4	Utah.....	Battle ship....	21,825	Parsons turb. (4)					12 B. & W.....	1,428
5	Vermont.....	do.....	16,000	Vert. 3-exp. (2)..	32½	53	e 61	48	do.....	1,097
6	Vestal.....	Fleet coller....	12,500	do.....	28	44½	75	54	6 B. & W.....	493
7	Vesuvius...	Torp. cruiser...	929	do.....	21½	31	e 34	20	4 Normand....	200
8	Vicksburg..	Comp. gunboat.	1,000	Vert. 3-exp. (1)..	15	23½	30	30	2 S. E.....	78
9	Viper.....	Submarine t. b.	170	{Explosion motors, d}					None.....	
10	Virginia....	Battle ship....	14,979	Vert. 3-exp. (2)..	35	57	e 66	48	24 Niclausse..	1,430.9
11	Vixen.....	Conv. gunboat	806	Vert. 3-exp. (1)..	18	27	48	25	2 S. E.....	126
12	Vulcan.....	Coller.....	12,260	Vert. 3-exp. (2)..	22	37½	60	42	4 S. E.....	234.68
13	Walke.....	T. b. destroyer.	a 742	Curtis (2).....					4 Yarrow.....	(b)
14	Warrington.	do.....	a 742	Zoelly turb. (2)..					4 White-Forster	(b)
15	Washington.	Arm. cruiser...	14,500	Vert. 3-exp. (2)..	38½	63½	e 74	48	16 B. & W.....	1,600
16	Wasp.....	Conv. gunboat.	630	Vert. 3-exp. (1)..	21½	31	e 34	20	2 S. E., 1 auxy.	
17	West Virginia.	Arm. cruiser...	13,680	Vert. 3-exp. (2)..	38½	63½	e 74	48	16 B. & W.....	1,600
18	Wheeling...	Comp. gunboat.	1,000	do.....	12	18	28	18	2 S. E.....	60
19	Whipple....	T. b. destroyer.	481	do.....	23	34	e 37	20	4 Thornycroft.	300
20	Wilkes....	Torpedo boat....	205	do.....	14	22	e 25½	18	3 Senbury.....	137.4
21	Wilmington	Gunboat.....	1,719	do.....	14½	22	33½	18	4 Hohenstein..	152
22	Winslow....	Torpedo boat...	142	do.....	12	19½	e 22	16	2 Moshier.....	95
23	Wisconsin..	Battle ship....	11,565	do.....	33½	51	78	48	8 S. E.....	684.8
24	Wolverine..	Cruiser.....	685	Inclined simple..			e 36	96	2 S. E.....	91
25	Worden....	T. b. destroyer.	476	Vert. 3-exp. (2)..	23	34	e 37	20	4 Thornycroft.	300
26	Wyoming...	Battle ship....	a 26,000	Parsons turb. (4)					12 B. & W.....	1,428
27	Yankee....	Conv. cruiser...	6,888	Vert. 3-exp. (1)..	32	52	84	54	3 D. E.....	414
28	Yankton...	Conv. gunboat	975	do.....	18	29	47	33	1 S. E.....	67
29	Yorktown...	Gunboat.....	1,710	Hor. 3-exp. (2)..	22	31	50	30	4 S. W.....	220

a Estimated.

b Oil fuel.

c Two low-pressure cylinders.

d Surface.

States naval vessels—Continued.

	Total heating surface.	Trial speed.	Total maximum I. H. P.	Total bunker capacity.	Coal endurance at 10 knots per hour.	Total weight of machinery.	Present condition of machinery as per last report.	Present service.
	Sq. ft.	Knots.	Tons.	Knots.	Tons.			
1	18,000	29.5	12,000	210			64.06 per cent completed.	Bath Iron Works.
2	19,748	29.58	8,300	166		207.16	Good.....	Pacific Torpedo Fleet.
3		{ 14.5 10.5 }	1,200	12,000			{ 11.6 per cent completed.	Newport News S. B. Co.
4	64,234	20.75	28,000	2,500			81.52 per cent completed.	
5	52,752	18.33	18,249	2,430		1,521	Good.....	Atlantic Fleet.
6	19,974	16	7,500	1,576		1,125	Very good.....	Special service.
7	8,204	21.65	4,295	145	1,800	214.93	Good.....	Torp. sta., Newport, R. I.
8	2,524	12.71	1,118	243	5,346	109.67	.....do.....	Special service.
9		{ 9.27 8.34 }	250	1,850			Excellent.....	Atlantic Torpedo Fleet.
10	57,534	9.01	23,468	1,924		1,844	.....do.....	Atlantic Fleet.
11	3,508	16	1,250	180	3,000		Fair.....	Naval Militia, N. J.
12	18,000	29.5	12,000	210			41.03 per cent completed.	Fore River S. B. Co.
13	10,200	12.82	3,736	818		734.7	Good.....	Special service.
14	18,000	30	12,000	210			73.92 per cent completed.	Wm. Cramp & Sons S. & E. B. Co.
15	70,944	22.27	27,463	1,950		2,160	Very good.....	Pacific Fleet.
16		16.5	1,800	79	2,880		Fair.....	Naval Militia, N. Y.
17	70,944	22.15	29,466	1,950	5,000	2,065.59	Very good.....	Pacific Fleet.
18	2,508	12.88	1,080	250	4,233	115.61	Good.....	Special service.
19	19,748	28.21	8,300	166		207.45	Fair.....	Pacific Torpedo Fleet.
20	7,800	25.99	3,000	60	2,400	95.16	Excellent.....	Reserve, Charleston.
21	5,092	15.08	1,594	300	2,200	185.15	Good.....	Asiatic Fleet.
22	5,260	24.82	2,000	44	1,200	50.82	Fair.....	Reserve, Boston.
23	21,205	17.17	12,609	1,331	4,950	1,278.08	Very good.....	Reserve, Portsmouth.
24	2,572		365	115	2,240		Good.....	Spec. serv., Great Lakes.
25	19,748	29.80	8,300	166		207.48	Excellent.....	Reserve, Charleston.
26	64,234	20.5	28,000	2,500			13.3 per cent completed.	Wm. Cramp & Sons.
27	10,581	14	3,800	1,175	5,200			Out com., New Bedford.
28	1,872	14	750	170	2,640		Good.....	Tender, Atlantic Fleet.
29	8,092	16.14	3,392	341	3,900	264.82	.....do.....	Special service.

* Submerged.

/ Gallons gasoline.

And 400 tons oil fuel.

^ Paddle wheels.

Gunboats and converted yachts under 600 tons displacement.

Name of vessel.	Type of vessel.	Displacement.	Trial speed.	Total maximum I. H. P.	Total bunker capacity.	Condition of machinery as per last report.	Present service.
		Tons.	Knots.		Tons.		
1 Alleen.....	Conv. yacht..	192	14	500	45	Good.....	Naval Militia, New York.
2 Alvarado.....	.....do.....	100	9	^a 690	16	.....do.....	Naval Militia, Louisiana.
3 Arayat.....	.....do.....	137	^a 10	^a 250	33	.....do.....	Out of commission, Cavite.
4 Callao.....	.....do.....	208	10	^b 250	33	.....do.....	Asiatic Fleet.
5 Dorothea.....	.....do.....	594	14	1,558	78	.....do.....	Naval Militia, Ohio.
6 Eagle.....	.....do.....	434	15.5	850	65	.....do.....	Special service.
7 Elcano.....	Gunboat.....	590	11	^b 600	94	.....do.....	Out of commission, Cavite.
8 Elfrida.....	Conv. yacht..	173	10.5	200	23	.....do.....	Naval Militia, North Carolina.
9 Hawk.....	.....do.....	375	14.5	1,000	70	.....do.....	Naval Militia, New York.
10 Hist.....	.....do.....	472	14	1,000	60	.....do.....	Special service.
11 Hornet.....	.....do.....	424	15	800	65	Fair.....	Norfolk yard.
12 Huntress.....	.....do.....	82	14	^a 250	17	.....do.....	Naval Militia, Missouri.
13 Mindoro.....	Gunboat.....	142	7	^b 125	30	Good.....	Asiatic Fleet.
14 Oneida.....	Conv. yacht..	150	12	350	20	.....do.....	Naval Militia, District of Columbia.
15 Pampanga.....	Gunboat.....	201	10	^b 250	33	Fair.....	Loaned to army.
16 Panay.....	.....do.....	142	8	^b 125	20	Good.....	Cavite yard.
17 Paragua.....	.....do.....	201	8.5	^b 250	33	Fair.....	Asiatic Fleet.
18 Quiros.....	.....do.....	350	11	550	78	Good.....	Cavite yard.
19 Restless.....	Conv. yacht..	137	13	500	12	.....do.....	Out of commission, Norfolk.
20 Samar.....	Gunboat.....	210	10.5	250	33	.....do.....	Pacific Fleet.
21 Sandoval.....	.....do.....	100	8	606	16	.....do.....	Naval Militia, New York.
22 Siren.....	Conv. yacht..	315	13	^a 630	45	Fair.....	Norfolk yard.
23 Stranger.....	.....do.....	546	14	^a 920	50	Good.....	Naval Militia, Louisiana.
24 Sylph.....	.....do.....	152	15	550	47	.....do.....	Special service.
25 Sylvia.....	.....do.....	302	9	^a 165	60	Fair.....	Naval Militia, Pennsylvania.
26 Villalobos.....	Gunboat.....	347	.....	500	65	Good.....	Asiatic Fleet.

^a Estimated.^b Twin screws.

Machinery data of United States naval tugs.

	Name of ves- sel.	Dis- place- ment.	Trial speed.	Total maxi- mum I. H. P.	Total bunker capac- ity.	Present condi- tion of ma- chinery as per last report.	Present service.
		Tons.	K'nots.		Tons.		
1	Accomac.....	187	10	250	35	Good.....	Navy-yard, Pensacola.
2	Active.....	296	12	600	64	.....do.....	Navy-yard, Mare Island.
3	Alice.....	356	10	250	16	.....do.....	Navy-yard, Norfolk.
4	Apache.....	650	10	550	100	.....do.....	Navy-yard, New York.
5	Chickasaw....	100	10	a 160	20	Fair.....	Torpedo station, Newport.
6	Choctaw.....	350	10	188	70	Good.....	Navy-yard, Washington.
7	Fortune.....	450	10	340	108	.....do.....	Tender, Pacific Torpedo Fleet.
8	Hereules.....	198	12	a 350	40	.....do.....	Navy-yard, Norfolk.
9	Iroquois.....	702	13.25	1,000	205	Under repair..	Out of commission, Mare Island.
10	Iwana.....	192	11.5	300	35	Very good.....	Navy-yard, Boston.
11	Massasoit....	202	9	a 150	34	Good.....	Naval station, Key West.
12	Modoc.....	241	10	a 175	40	.....do.....	Navy-yard, Philadelphia.
13	Mohawk.....	420	12	400	32	.....do.....	Navy-yard, Norfolk.
14	Narkeeta....	192	11.5	300	35	.....do.....	Navy-yard, New York.
15	Navajo.....	.....	12	935	(b)	.....do.....	Navy-yard, Mare Island.
16	Oseeola.....	571	14	a 1,000	150	Fair.....	Naval station, Key West.
17	Patapsco.....	a 755	a 13	a 1,160	316	Good.....	Tender, Atlantic Fleet.
18	Patuxent.....	a 755	a 13	a 1,160	316	.....do.....	Do.
19	Pawnee.....	275	10	250	16	.....do.....	Navy-yard, New York.
20	Pawtucket..	225	12.2	450	30	.....do.....	Navy-yard, Puget Sound.
21	Penacook....	225	12	450	28	.....do.....	Navy-yard, Portsmouth.
22	Pentucket...	158	12	450	28	.....do.....	Navy-yard, New York.
23	Peoria.....	488	9	a 270	68	.....do.....	Naval station, San Juan.
24	Piscataqua..	631	16	2,000	328	.....do.....	Asiatic Fleet, tender.
25	Pontiac.....	401	10.5	425	45	Fair.....	Navy-yard, New York.
26	Potomac.....	785	16	2,000	200	Good.....	Navy-yard, Norfolk.
27	Powhatan...	194	13	397	57	.....do.....	Navy-yard, New York.
28	Rapido.....	66	a 10	a 125	14	.....do.....	Navy-yard, Cavite.
29	Rocket.....	270	8	450	33	.....do.....	Navy-yard, Norfolk.
30	Samoset.....	225	12	450	30	.....do.....	Navy-yard, Philadelphia.
31	Sebago.....	190	12	506	30	Bad; to be overhauled.	Navy-yard, Charleston.
32	Sloux.....	155	10	290	45	Good.....	Navy-yard, Boston.
33	Sotoyomo...	158	11.1	506	28	.....do.....	Navy-yard, Puget Sound.
34	Standish....	450	10	340	80	.....do.....	Naval Academy.
35	Tecumseh...	214	11	500	40	Fair.....	Navy-yard, Washington.
36	Traffic.....	280	10	a 190	36	Good.....	Navy-yard, New York.
37	Transfer.....	684	.....	.....	85	.....do.....	Do.
38	Triton.....	212	13	300	45	.....do.....	Navy-yard, Washington.

a Estimated.

b 1,700 barrels oil fuel.

Vessels without propelling machinery, but with boilers and auxiliary machinery.

	Name of vessel.	Type of vessel.	Displacement.	Propulsion.	Coal capacity.	Condition of auxiliary machinery as per last report.	Present station.
1	Cumberland.....	Steel training ship.	<i>Tons.</i> 1,910	Sails..	<i>Tons.</i> a 100	Good.....	Training sta., Newport.
2	Intrepid.....	.....do.....	1,910	...do...	a 100	Excellent.	Training sta., San Francisco.
3	Reina Mercedes.....	.....do.....	3,000	...do...	194	Fair.....	Training sta., Newport.

a Estimated.

Very respectfully,

H. I. CONE,

Engineer in Chief, U. S. Navy, Chief of Bureau.

The SECRETARY OF THE NAVY.

70809°—NAVY 1910—33

REPORT OF THE PAYMASTER-GENERAL OF THE NAVY, CHIEF OF THE BUREAU OF SUP- PLIES AND ACCOUNTS.

NAVY DEPARTMENT,
BUREAU OF SUPPLIES AND ACCOUNTS,
Washington, D. C., September 26, 1910.

SIR: I have the honor to present the report of the Paymaster-General of the Navy upon the operations of the Bureau of Supplies and Accounts for the fiscal year ending June 30, 1910, accompanied by tabulated statements showing in detail the cost of maintaining the fleet, the navy-yards, and stations:

These statements cover all transactions involving expenditures for the naval establishment, and show, in principal items, as follows:

Amounts drawn from the Treasury	\$120,961,535.08
Expenditures on account of construction of new ships, including labor and material.....	24,736,599.47
Cost of repairs to ships and equipage at home and abroad.....	8,612,297.56
Cost of maintaining ships in commission (other than receiving ships), including pay of officers and men, subsistence, and incidental expenses.....	32,157,061.82
Cost of maintaining receiving ships, including pay of officers and enlisted men, subsistence, and incidental expenses.....	5,626,596.45
Cost to the Navy:	
Of the Light-House Establishment.....	\$120,424.97
Of the Fish Commission.....	94,086.85
Of the Naval Militia of the several States.....	407,582.35

- A.—Table 1. Cash account, by appropriations.
 Table 2. Summary of appropriation account.
 Table 3. Advances to disbursing officers, "General account of advances."
 Table 4. Statement of receipts and payments.
 Table 5. Analysis of payments.
 Table 6. Statement of differences, balance "Appropriations" and balance "Receipts and payments."
 Table 7. Analysis of cost of the naval establishment during the fiscal year 1910.
 Table 8. Statement of differences, "Costs," and "Payments."
- B.—Table 1. Total expenditures for all purposes, by yards and stations.
 Table 2. Total expenditures for all purposes, by appropriations.
 Table 3. Cost of construction of new vessels (Title A).
 Table 4. Cost of repairs to vessels at shore stations (Title D).
 Table 5. Expenditures on account of improvements to real estate and chattels (Title E—Industrial) and machinery plant (Title F), by yards and stations.
 Table 6. Expenditures on account of improvements to real estate and chattels (Title E—Industrial) and machinery plant (Title F), by appropriations.
 Table 7. Expenditures for maintenance of yards and stations (Titles E, F, and G), by yards and stations.

- B.—Table 8. Expenditures for maintenance of yards and stations (Titles E, F, and G), by appropriations.
- Table 9. Expenditures for repairs to equipage of ships in commission (Title P).
- Table 10. Expenditures for improvements to real estate and chattels (Title R—Military), by yards.
- Table 11. Expenditures for improvements to real estate and chattels (Title R—Military), by appropriations.
- Table 12. Expenditures for maintenance of real estate and chattels (Title S—Military), by yards.
- Table 13. Expenditures for maintenance of real estate and chattels (Title S—Military), by appropriations.
- Table 14. Expenditures on account of tugs, lighters, fleet supply, etc., (Title T), by yards.
- Table 15. Expenditures on account of tugs, lighters, fleet supply, etc. (Title T), by appropriations.
- Table 16. Expenditures on account of leave, holiday, disability, and incidentals (Title V), by yards.
- Table 17. Expenditures on account of leave, holiday, disability, and incidentals (Title V), by appropriations.
- Table 18. Expenditures for maintenance and improvements at each navy-yard (Titles G, S, T, E, F, R).
- C.—Statement showing operations of the naval supply fund.
- D.—Table 1. Statement showing value of supplies received and expended by general storekeepers during the fiscal year, and the balance on hand July 1, 1909, and June 30, 1910.
- Table 2. Statement showing the value of stores, by classes, at the several yards and stations June 30, 1910.
- E.—Statement of the value of supplies received and expended on board ships in commission.
- F.—Statement showing cost of maintaining ships in commission during the fiscal year.
- G.—Statement of public sales of condemned property.
- H.—Statement of receipts and expenditures of provisions and clothing and small stores.
- I.—Statement of midshipmen's store fund.
- J.—Summary of contracts.
- K.—Table 1. Shipments of coal.
- Table 2. Coal purchased.
- Table 3. Appropriations for coal.
- L.—Statement of marine corps stores.
- M.—Statement of total value of stores of the naval establishment.

THE BUREAU.

The act making appropriations to supply deficiencies in the appropriations for the fiscal year 1910, and for other purposes, approved June 25, 1910, provides as follows:

Naval supply account for the naval establishment: All stores on hand July first, nineteen hundred and ten, shall be charged to a naval supply account on the records of the Bureau of Supplies and Accounts, and all purchases of stock or expenditures for manufactured or repaired articles for stock at navy yards or stations, during the fiscal years nineteen hundred and eleven and nineteen hundred and twelve, shall be charged to this account and be paid for from "General account of advances."

The amount so advanced during the fiscal years nineteen hundred and eleven and nineteen hundred and twelve shall be charged to the proper appropriations as these stores are consumed from stock, and when disbursements made for all other purposes are accomplished, the amount so charged shall be returned to "General account of advances" by pay or counter warrants: *Provided, however*, That such material as provisions, clothing and small stores, medical stores, and such other materials as the Secretary of the Navy may designate, may be purchased by specific appropriations or transferred to specific appropriations before such materials are issued for use or consumption. The said charge, however, to any particular appropriation shall be limited to the amount appropriated therefor. * * *

The above law has enabled the Bureau, with the assistance and hearty cooperation of the firm of Marwick, Mitchell & Co., chartered

accountants, ably represented by Mr. J. Mendenhall and his corps of assistants, to establish at all yards and stations a comprehensive set of general storekeeping books, the "Naval supply account" under "General account of advances" providing the necessary suspension account wherein may be carried all stores for the navy with comparatively few exceptions, pending their issue to the various departments, ships, and plants included within the activities of the naval service. From this account may, by means of the cost-of-work accounting system, also be lodged expenditures under logical subheads of appropriations, a desideratum hitherto unattainable except through the medium of the naval supply fund.

The books soon to be opened in the bureau are designed to contain approximately 40 controlling accounts in the general ledgers alone, with an extended series of subsidiary ledgers for the recording of the numerous charges required to be submitted in the monthly report of expenditures of labor and material from the various yards. These books will, if promptly and properly posted, constitute a permanent record of the value of every item of expenditure, whether of money or of stores, and while great benefit and saving to the Government in the matter of store expenditure will undoubtedly result in consequence of the adoption of the new method of accounting, great care and close supervision must be exercised at all times so as to prevent the liabilities incurred under the advanced credits afforded by general account of advances exceeding in money and stores at any one time the total amount available under all the appropriations for the navy.

On the efficiency of the clerical force employed in the bookkeeping section of the bureau will depend the final and successful outcome of the bureau's efforts to maintain a satisfactory system of accounts. The present bookkeeping force is, even under present conditions, compelled to work to the limit of its endurance and in my opinion is inadequate to cope successfully with the prospective demands shortly to be made upon it. Because of the ultimate saving to the Government to be derived from an accounting system that will permit the accurate checking of all labor and material, the necessary force to perfect the plan and handle the work in the Bureau of Supplies and Accounts should be provided, and for this reason I can not too strongly urge that wherever in the opinion of the expert accountants an additional force is required to carry out properly the system inaugurated by them a suitable number of clerks be employed.

COST-OF-WORK ACCOUNTING SYSTEM.

"The cost-of-work accounting system" which was in part established at the navy-yard, Boston, shortly after July 1, 1909, has been extended to other stations and enlarged to meet the conditions growing out of the department's shop and office consolidation plan. At present central accounting offices (in charge of pay officers) are in operation at the navy-yards, Portsmouth, Boston, New York, Philadelphia, Norfolk, Charleston, Mare Island, Puget Sound, and Cavite, P. I., and since the close of the last fiscal year the system has been arranged so as to make it conform in all essentials to existing conditions. A comprehensive "classification of accounts" for the guidance of commandants, accounting officers, and others concerned

has been prepared and put in operation as from July 1, 1910. By this classification accounts under shop, power, general and store-keeping expenses, as well as for charges under the appropriation "Maintenance, Yards and Docks," and "Repairs and Preservation," were amplified and revised, the latter two being so arranged as to harmonize with the records at present maintained by the Bureau of Yards and Docks.

In consonance with the foregoing, a uniform report of expenditures has been adopted, as have books of accounts for the yards operating under the cost accounting system. It is believed that these will afford the means by which accounting officers may be enabled to strike monthly trial balances, a seemingly impracticable achievement under the methods previously employed. It is expected that these books will be opened by November 1, 1910. In addition, a separate system of accounting for yard foundries has been introduced and is in process of development.

A cost-accounting officer is at present attached to each of the nine principal navy-yards, and each one so detailed should have under him a junior, the junior not only to act as assistant, but primarily to obtain the information and develop the knowledge necessary for him to possess before assuming, on his own responsibility, these new and important duties.

ADMINISTRATIVE EXAMINATIONS.

Pursuant to the department's instructions of June 13, 1910, the bureau has given full consideration to the report of the committee appointed by the Honorable the Secretary of the Treasury, to investigate the duties of the accounting officers of the Treasury, and to recommend such changes in the organization as will tend to increase the efficiency of the accounting system.

With regard to that committee's recommendation looking toward an administrative examination of all navy accounts, preliminary to their transmission to the Auditor for the Navy Department for settlement, the following is submitted:

An administrative examination is an examination of individual disbursing officers' accounts made by administrative officers, as distinguished from that made by the accounting officers of the Treasury, and is in addition to and not in lieu thereof. As applied to the navy, it means an examination to be made in the Bureau of Supplies and Accounts of the details of each quarterly or monthly pay roll paid by each officer. A few of the reasons given by the committee above referred to for such administrative examination are as follows:

If administrative examination were made of navy disbursing officers' accounts, the knowledge and control thus afforded the department would strongly tend to increase the efficiency of the service; the department would thus be advised at first hand of the manner in which its pay officers are complying with the regulations, orders, and instructions and the examination would lead to the correction of defects in rendering accounts and insure uniformity in all matters of detail pertaining to the system of accounts. It would enable the department to ascertain with approximate definiteness the condition of annual appropriations made for its support.

This bureau, as stated in a previous communication (letter No. 112910, dated Aug. 10, 1910), heartily concurs in the views thus expressed by the committee; for, in its full application, an administrative examination will be had not only of the accounts of all officers

of the Pay Corps, but of some 20 recruiting officers, 6 naval attachés, and about 20 special disbursing officers and fiscal agents as well, all of which, with the exception of the pay officers' accounts, are already being given an administrative examination by the bureau. It would then be practicable for the bureau to analyze, advise concerning, and to correct expenditures with a dispatch possible by no other means. The examination would also disclose the presence of undercredits to officers and enlisted men now seldom, if ever, reported by the Auditor for the Navy Department, excepting perhaps in the case of allotments or some unusual circumstance. This alone is a feature of the examination which, if made effective, would prove of value to many, as it generally happens that amounts due for undercredits are now recovered only through the agency of paid attorneys.

In the War Department, administrative examinations have been in full operation for many years, and in the Marine Corps for more than a year, with unqualified success. Although the question as to whether or not the work in the office of the Auditor for the Navy Department would be decreased because of the adoption of such an examination may be regarded as beyond the purview of the Navy Department, the opinion of this bureau is that such work would be materially decreased, and the Secretary of the Treasury has so stated in his letter of June 13, 1910. Under the conditions which have obtained for many years, the Auditor for the Navy Department usually takes from nine to twelve months from the time an account is received to prepare and forward a statement of differences to the disbursing officer concerned. Such delayed statements often arrive too late to be of use in recovering amounts suspended or disallowed, thus making the position of a disbursing officer precarious and causing wonder as to why these delays are tolerated or permitted to continue without abatement. Should the Bureau of Supplies and Accounts be charged with the duties of conducting administrative examinations, officers would undoubtedly be furnished with preliminary statements of differences within from sixty to ninety days after the rendition of their accounts.

In view of the foregoing, it is recommended that the proposition of the Honorable the Secretary of the Treasury to establish administrative examinations for the navy, be adopted, and that the Navy Department request Congress to enact suitable legislation as part of the next naval bill, as follows:

Provided, That section 3622 of the Revised Statutes be amended by striking out the following words, to wit:

"Disbursing officers of the navy shall, however, render their accounts and vouchers direct to the proper accounting officer of the Treasury."

Provided further, That hereafter all the accounts of individual pay officers and other disbursing officers of the navy shall be examined by the Paymaster-General of the Navy before said accounts are forwarded to the Treasury Department for final audit, and that the Secretary of the Navy may appoint for duty in the Bureau of Supplies and Accounts, upon the nomination of the Paymaster-General, not more than five paymaster's clerks who have had experience at sea: *And provided further*, That the time for examination of said accounts after the date of actual receipt in the Bureau of Supplies and Accounts, and before transmission to the Treasury Department, shall not exceed ninety days.

FUEL AND TRANSPORTATION.

It is gratifying to note that the standard of quality of steaming coal has been maintained throughout the year to the satisfaction of

the fleet, the only objections noted being in the quality of coal taken from the piles at San Juan, P. R., and New London, Conn., which stocks have been long in storage. The number of suppliers capable of delivering acceptable coal during the past year has been slightly increased, due to changes in control of the output of the mines in the bituminous region. From these the bureau has endeavored to place orders with such commercially responsible firms only as have proven their ability to furnish coal of the required standard and whose facilities were shown to be ample. Upon recommendation of the Bureau of Steam Engineering, arrangements were made to furnish the Torpedo Flotilla with specially selected, all-screened coal having 15,000 British thermal units per pound (the run-of-mine average is but 14,600 British thermal units), with a premium or penalty for coal over or below the standard thus established of 3 cents for every 100 British thermal units per pound. This coal proved highly satisfactory, and it is the desire of the bureau to furnish, whenever practicable, similar special coal to all destroyers and possibly to the ships of the fleet, although but few mines can meet the high standard and conditions established, and certain operators have expressed their unwillingness to conform to these requirements.

The excellent result achieved by the Bureau of Steam Engineering in pointing out the economies accomplished and those possible in the consumption of coal will undoubtedly have a most beneficial effect upon the service at large, and it is believed that the new rules governing steaming competition will make it possible to maintain the augmented fleet on a coal consumption no greater than at present. During the fiscal year 1910, 651,241 tons of coal were consumed by the fleet, at a cost of \$3,164,877.

The following table shows comparative percentages of total consumption aboard naval vessels for various purposes during each of the fiscal years 1905 to 1910, inclusive:

Year.	Quantity.	Steaming.	Galleys.	Steam launches.	Distilling.	Electric plant.	Heating, flushing, etc.
	Tons.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1905	428,247	52.00	2.00	2.00	(a)	44.00	(a)
1906	436,654	50.50	2.00	2.25	(a)	45.25	(a)
1907	521,990	64.51	3.07	2.73	8.21	12.60	8.88
1908	618,085	49.30	1.90	1.97	12.11	21.79	12.93
1909	813,615	57.73	1.51	1.53	10.12	19.24	9.87
1910	651,241	51.86	1.80	2.05	11.31	18.35	14.63

(a) Not reported separately.

The bureau wishes to express its indebtedness to the Bureau of Mines, Interior Department, for the reliable data and valuable assistance rendered throughout the year, which included investigations of all the principal mines in the eastern bituminous region, as well as those in the State of Washington and in British Columbia.

FUEL OIL.

As the greater number of new destroyers have been fitted with a view to burning liquid fuel exclusively, and as this fuel is likewise to be supplied to certain battle ships in addition to their coal, contracts

with oil-supplying companies have been entered into. Under these contracts deliveries are called for at Portsmouth, Boston, Providence, Newport, New York, Philadelphia, Baltimore, Annapolis, Washington, Norfolk, Charleston, Pensacola, Key West, New Orleans, Guantanamo, Cuba, and Port Arthur, Tex., the distributing points specified being Providence, R. I., Bayonne, N. J., Marcus Hook, Pa., Curtis Bay, South Branch of the Elizabeth River, Charleston, S. C., and Port Arthur, Tex.

One of the greatest difficulties to be overcome when arranging for an adequate supply of fuel oil of the special standard established for the navy was that at none of the commercial distributing points did the oil dealers carry an amount sufficient for the needs of our ships, and it becomes necessary, therefore, to obtain special stocks of such oil for this purpose.

When the new tank stations now under construction at Bradford, R. I., Norfolk, Va., Charleston, S. C., Key West, Fla., Guantanamo, Cuba, and San Juan, P. R., are completed, it will be possible to maintain adequate supplies of suitable oil without recourse to commercial distributing points.

APPROPRIATIONS.

The recognized practice for many years by which money appropriated for the naval service has, by the Congress, been divided so as to segregate the totals under the different bureaus and subheads thereof has resulted in the development of a complicated system of accounting which might be greatly simplified should all money be appropriated in a lump sum for each bureau. Attention in this connection is invited to the heterogeneous, not to say unnecessary, arrangement of naval appropriations. At the present time the moneys for the naval establishment are divided into 180 current appropriations, and taking into consideration that each annual appropriation remains open for at least two fiscal years, there are carried on the bureau's books approximately 450 appropriation accounts. It is evident, even to the most casual observer, that the expenditure of some \$150,000,000 through the media of from 200 to 500 appropriations must present so many difficulties that an entirely satisfactory method of accounting for such expenditures can not be devised.

Under the act of Congress approved June 25, 1910, authority was granted the Secretary of the Navy to make all purchases of stores for stock under one account—i. e., general account of advances—and to make the necessary charges against the appropriations concerned whenever such stores should be issued for the use of the bureau having cognizance thereof. While this arrangement somewhat simplified the store problem and made possible, as stated elsewhere in this report, a cost-of-work accounting system, yet it only altered slightly for the better the very great complexity of the general accounting, because the great number of appropriations against which charges must be lodged eventually has not been reduced.

SEA MESSING OF MIDSHIPMEN ON THE ANNUAL PRACTICE CRUISE.

For the first time in the history of the Naval Academy the midshipmen during their annual practice cruise were subsisted entirely upon the navy ration as issued to the enlisted men of the practice squadron.

Aside from the advantages, such, for instance, as a saving of money to the midshipmen, the lessening of storage spaces required, better refrigerating arrangements, etc., the fact that the enlisted men's rations completely satisfied the midshipmen who are accustomed to the excellent cuisine of the Naval Academy is gratifying evidence as to the character and quality of the navy ration regularly issued to the enlisted men throughout the service.

STOREKEEPING AFLOAT.

In response to a general demand throughout the service, pay officers were placed in charge of the general stores and the keeping of accounts pertaining thereto on board several ships of the navy, relieving from these onerous duties a number of line officers. This experimental plan, having proved successful, has been universally adopted, and since the close of the last fiscal year orders have been issued extending it to all vessels of the navy in commission.

Respectfully,

T. J. COWIE,
Paymaster-General, U. S. Navy.

The SECRETARY OF THE NAVY.

in 16 represent outstandi

ous and ats.	(11) Carried to surplus fund by Treasury Department.	B ha
5. 46		
2. 30		
	\$110. 22	
1. 31		
4. 22		
5. 10	541. 66	
5. 18		
4. 73		
	32, 859. 82	
5. 09		11
1. 92		3
3. 86		
3. 69		
1. 28		
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3. 91		
0. 21	22, 882. 98	
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	7, 290. 51	
5. 68		
3. 37		
9. 32		
5. 36	35, 000. 00	
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7. 86		
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2. 77		
	1, 030. 60	
5. 73		1
0. 99		
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3. 00		

16 represent outstanding

ous and ths.	(11) Carried to surplus fund by Treasury Department.	B ha:
17	30	
18		
18	\$1,124.26	
18		
18	09	
18	75	
18	59	
18	80	
18	04	
18		
18		
18	02	
18	01	
18	142.80	
18	55	
18		
18	77	
18		
18	18	
18	59	
18	23	
18	44	
18		
18		
18		
18		
18		
18	05	
18	55	
18		
18	165.96	
18	162.79	
18		
18		
18	62	
18	67	
18	74.48	
18		
18		
18	96.23	
18		
18		
18	40	
18	35	
18	75	
18		
18	03	
18	22	
18	2,984.99	
18		
18		
18		
18	61	
18		
18		
18	18	
18	25	
18	272,701.10	
18		
18		
18	102.80	

16 represent outstanding credits

	(11) Carried to surplus fund by Treasury Department.	(12) Balances c hand June 1910.
0		\$55.
1		348.
2	\$18,231.03	12,350.
3	2.76	2,828.
4		24,300.
5		28,687.
6		31,366.
7		30,953.
8		27,257.
9		46,733.
0		19,935.
1		3,065.
2		11,228.
3		46,873.
4		33,260.
5		21,934.
6		
7		159,811
8		172,676
9		407,716
0		20,027
1		1,680
2	4,279.50	
3		303,109
4		38,950
5	12,673.96	
6		3,799
7	4,762.67	
8	124.59	
9		16,000
0		
1		14,853
2		
3		
4		6,456
5		17,257
6	3,888.80	
7		13,168
8		6,948
9		73
0	31,917.02	
1	793.83	
2		20,000
3		13,448
4	1,300.97	
5	378.57	
6		25,000
7		
8		
9		46,378

Ann 16 represent outstar

	(11)
aneous s and ents.	Carried to surplus fund by Treasury Department.
	\$1,010.52
	6,000.00
150.09	
400.82	
132.26	
349.69	
105.24	
967.09	11,187.45
214.95	
450.27	
900.71	186.56
128.98	98,291.77
868.51	801,337.10

' pay rolls.

STATEMENT A--Continued.

TABLE II.—Summary of appropriations.

DEBITS.		
Balance on hand June 30, 1909.....		\$35,886,354.93
Appropriations for fiscal year 1910 and public works:		
Naval act, March 3, 1909.....	\$129,232,237.77	
Deficiency act, February 25, 1910.....	358,136.46	
Deficiency act, June 25, 1910.....	359,424.82	
Naval act, March 3, 1909 (transferred from navy pension fund, interest).....	78,151.00	
		\$130,027,950.05
Appropriations for fiscal year 1909, deficiency act June 25, 1910.....		62,021.03
Appropriations for fiscal year 1908, deficiency act February 25, 1910.....	4,847.79	
Appropriations for fiscal year 1908, deficiency act June 25, 1910.....	553,342.44	
		558,190.23
Appropriations for fiscal year 1907, deficiency act June 25, 1910.....		23,016.71
Miscellaneous claims:		
Deficiency act, February 25, 1910.....	37,175.94	
Deficiency act, June 25, 1910.....	63,788.89	
		100,964.83
Appropriations for the Marine Corps:		
Naval act March 3, 1909.....	7,624,810.28	
Deficiency act February 25, 1910.....	40,724.16	
Deficiency act June 25, 1910.....	171,964.65	
		7,837,499.09
Covered in to credit of appropriations of amounts carried to surplus fund in error.....		45,458.32
Miscellaneous claims acts of February 19, 1879, and February 24, 1905.....		25,591.00
		138,609,641.94
Covered in to the credit of funds and appropriations, receipts from miscellaneous sources:		
Naval hospital fund.....	896,959.43	
Pay—		
Navy, deposit fund.....	636,419.00	
Marine Corps, deposit fund.....	141,917.00	
Navy pension fund, interest.....	448,765.08	
Ordinance material, proceeds of sale.....	201,996.66	
Clothing and small stores fund.....	1,766,806.17	
Navy, fines and forfeitures.....	113,569.31	
Pay, miscellaneous—		
1909.....	2,377.44	
1910.....	2,221.32	
Provisions, Navy—		
1909.....	326,482.08	
1910.....	143,305.51	
		4,679,819.00
Transfer—		
Naval supply fund.....	12,701,601.67	
Miscellaneous.....	6,717,324.97	
		19,418,926.64
Adjustments.....		603,381.03
		24,702,127.27
Total.....		<u>199,209,173.46</u>
CREDITS.		
Charged to account of appropriations:		
Public bills—		
Charged direct to objects.....	35,770,668.77	
Supplies purchased.....	25,717,665.84	
		61,488,334.61
Labor, fiscal year—		
1910.....	19,613,013.01	
1909.....	523,724.52	
		20,136,737.53
Rolls of ships and stations (officers and enlisted men):		
Pay of the Navy.....	31,767,176.87	
Provisions, Navy.....	170,207.63	
Outfits for enlisted men.....	625,513.33	
Pay, Marine Corps.....	761,964.83	
		33,324,862.66
Marine Corps—		
Pay rolls.....	2,995,391.62	
Vouchers.....	2,924,636.05	
		5,920,027.67
Miscellaneous claims.....		64,120.76
		120,934,083.23
Charged to account of funds:		
Naval Supply Fund.....	\$12,701,601.67	
Pay, Navy, deposit fund.....	750,214.95	
Navy pension fund, interest.....	440,450.27	
		13,892,266.89

STATEMENT A—Continued.

TABLE II.—*Summary of appropriations—Continued.*

CREDITS—Continued.		
Charged to account of funds—Continued.		
Labor, other Departments (charged to appropriations).....	\$28,023.37	
Labor, special deposits (charged to appropriations).....	13,200.43	
		\$41,223.80
Transfers, miscellaneous.....	6,152,892.69	
Adjustments.....	868,075.71	
		7,020,968.40
Carried to the surplus fund.....		801,337.10
Balance on hand June 30, 1910.....		56,579,294.04
Total.....		199,269,173.46

TABLE III.—*Advances to disbursing officers by requisitions drawn on the Treasury Department under "General account of advances."*

To pay officers, navy pay offices, yards, and stations.....	\$92,086,137.81
To pay officers, ships in commission.....	21,585,658.00
To disbursing officers, Marine Corps.....	5,431,985.00
To fiscal agents, London, England.....	800,000.00
To other disbursing officers.....	163,300.00
To pay bills of exchange drawn on the Navy Department.....	944,454.77
Total.....	120,961,585.08

TABLE IV.—*Statement of receipts and payments.*

RECEIPTS.		
Balance July 1, 1909.....		\$41,765,474.25
Appropriations (see Table I).....		138,680,691.26
Interest of 3 per cent on \$14,000,000 for navy pension fund.....		420,000.00
From sales of supplies:		
Provisions.....	\$1,096,167.85	
Clothing and small stores.....	118,642.86	
Miscellaneous.....	181,636.94	
Marine Corps.....	66,530.57	
		1,432,978.22
For services and supplies furnished other departments.....		299,929.03
From sales of condemned stores.....		376,278.97
From special deposits, services and supplies furnished private parties.....		52,178.34
From miscellaneous sources:		
Rents.....	1,350.00	
Surrendered pensions, navy beneficiaries at Naval Home.....	15,960.99	
Purchase of discharges by enlisted men.....	19,179.78	
Sales of deceased men's and deserters' effects.....	8,908.93	
Collected from contractors, purchase for accounts.....	5,588.22	
Fiscal agents, London, England, interest on daily balances.....	2,784.50	
Premiums on bills of exchange.....	1,492.78	
Miscellaneous.....	82,186.84	
		137,452.04
Total.....		183,164,982.11

PAYMENTS.		
Labor for other departments.....		225,812.33
Labor for private parties.....		48,801.30
Transferred to Interior Department, account navy pensions.....		362,299.27
To the United States Treasury (miscellaneous receipts).....		279,284.64
Expenses, sales condemned stores.....		6,279.03
To the surplus fund.....		801,337.10
For account of the Naval Establishment.....		117,548,503.96
Balance June 30, 1910.....		63,892,664.48
Total.....		183,164,982.11

TABLE V.—*Analysis of payments.*

Public bills.....	\$61,552,455.37
Account of labor:	
1910.....	19,613,013.01
1909.....	523,724.52
Paid on rolls, officers and enlisted men:	
Yards and stations.....	7,611,605.40
Ships in commission.....	18,740,119.16
Account of the Marine Corps.....	5,920,027.67
Allotments and advances.....	3,587,558.83
Total.....	117,548,503.96

STATEMENT A—Continued.

TABLE VI.—Statement of differences, balance "Appropriations" and balance "Receipts and payments."¹

Receipts and payments account, balance June 30, 1910.....		\$63,892,664.48
Appropriations account, balance June 30, 1910.....		56,579,294.04
Difference.....		<u>7,313,370.44</u>
Balances in hand June 30, 1910:		
Pay officers at navy pay offices, yards and stations.....	\$6,253,113.41	
Pay officers, ships in commission.....	3,538,974.53	
Disbursing officers of the Marine Corps.....	567,952.67	
Special disbursing officers.....	52,379.29	
Fiscal agents, London, England.....	74,881.18	
Masters of naval auxiliaries.....	44,005.13	
		<u>10,531,306.21</u>
Advances to disbursing officers, in transit.....		1,353,184.24
Transfers of funds between disbursing officers, in transit.....		450,045.81
Deposits to credit of United States, not covered in June 30, 1910.....		45,450.72
Total.....		<u>12,379,986.98</u>
CREDITS.		
Pay of the navy, deposit fund.....		750,214.95
Navy pension fund, interest.....		440,450.27
Deposits by seamen, not adjusted.....		397,936.00
General account of advances.....		3,478,015.32
Total.....		<u>5,067,616.54</u>
Difference.....		<u>7,313,370.44</u>

TABLE VII.—Analysis of the cost of the naval establishment during the fiscal year ending June 30, 1910.

[NOTE.—The following refers entirely to the expenditures of money for the fiscal year as reported on pay rolls and public bills, and includes in some cases amounts not settled by payment, as, for example, amounts due and unpaid on rolls (shown in statement of differences following):]

Expenditures for account of new vessels, repairs to ships, cost of commission of ships (Titles A, D, P, B, C, and Y); improvements and general maintenance of yards and stations (Titles E, F, G, R, S, and T), including labor, public bills, and accrued pay and allowances of officers and enlisted men and miscellaneous (Titles O and N, and V labor only).....		\$82,001,615.72
Expenditures for supplies for store (Title X).....		25,717,665.84
Expenditures, miscellaneous:		
Title II—		
Officers and men retired.....	\$2,498,306.91	
Officers on leave and waiting orders.....	251,696.09	
		<u>\$2,750,003.00</u>
Title I—Officers on special duty.....		1,740,923.78
Title L—Officers on duty with Light-House Establishment.....		120,424.99
Title M—Officers and enlisted men, Fish Commission vessels.....		79,777.13
Title V—		
Advertising.....	\$4,504.61	
Freight.....	422,433.01	
Transportation of men, including travel allowance.....	758,915.91	
Mileage and transportation of officers.....	359,861.61	
Traveling expenses, civilian employees.....	38,652.13	
Telegraphing.....	30,880.29	
Transportation of funds.....	4,790.99	
Expenses of boards, courts, and prisoners.....	65,516.89	
Special instruction of students.....	9,397.73	
Target practice, prizes, and ranges.....	54,323.10	
Incidentals to inspection.....	122,589.70	
Medals for officers and men.....	258.31	
Care of sick in civil hospitals.....	11,321.58	
Care, burial, and transportation of the dead.....	18,648.28	
Printing.....	50,087.11	
Demurrage and incidental expenses of handling coal.....	33,454.08	
Hydrographic surveys.....	21,724.45	
Apprehension of deserters.....	18,847.18	
Expenses of recruiting, including subsistence and advertising.....	122,423.76	
Expenses naval attachés.....	17,960.07	
Loss on bills of exchange and depreciation of silver.....	42,426.67	
Commission paid fiscal agents.....	2,920.87	
Interest on deposits.....	33,468.56	
Relief of sufferers from earthquake in Italy.....	9,476.16	
Quarantine expenses.....	375.73	
Entertaining.....	10,526.30	
Campaign badges.....	1,843.97	
Death gratuities.....	50,427.45	

STATEMENT A—Continued.

TABLE VII.—Analysis of the cost of the naval establishment during the fiscal year ending June 30, 1910—Continued.

Expenditures, miscellaneous—Continued.		
Title V—Continued.		
Forage.....	\$309.14	
Relief of vessels in distress.....	3,293.02	
Fines and forfeitures.....	13,895.52	
Incidentals.....	121,123.05	
Patent rights.....	6,350.00	
Experiments, ordnance.....	3,098.90	
Expenses, board of visitors, Naval Academy.....	1,970.72	
Professional services.....	37,469.38	
Traveling expenses of nurses.....	507.54	
Sundry claims, pay of the navy.....	136,700.51	
Nautical books and charts.....	8,277.20	
Honorable discharge gratuities.....	556,427.93	
Outfits on first enlistment.....	625,513.33	
Miscellaneous claims.....	64,120.76	
	<u>\$3,897,173.50</u>	
Title W—Repairs to material in store.....	19,753.17	
		<u>\$8,608,055.57</u>
Expenditures for account of the Marine Corps.....		5,920,027.67
Total (costs).....		<u>122,247,364.80</u>

TABLE VIII.—Statement of differences, "cost," and "payments."

Cost of the naval establishment.....	\$122,247,364.80
Payments.....	117,548,503.96
Difference.....	<u>4,698,860.84</u>

DEBITS.

Due and unpaid on rolls July 1, 1909, yards, stations, and ships.....	\$2,166,185.62
Due and unpaid on rolls; transferred.....	43,286.61
Overpayments on rolls:	
June 30, 1910.....	21,990.97
Transferred.....	1,858.76
Deserters.....	14,075.05
Sundry credits on rolls.....	7,337.46
Allotments and advances not reported checked on rolls.....	104,809.60
Unpaid labor July 1, 1909.....	523,724.52
	<u>2,883,268.68</u>

CREDITS.

Due and unpaid on rolls June 30, 1910, yards, stations, and ships.....	2,820,918.79
Overpayments on rolls July 1, 1909.....	19,209.31
Due and unpaid on rolls:	
Deceased men's accounts.....	35,871.32
Deserters.....	116,309.46
Forfeited by enlisted men.....	656,537.71
Charged on account of clothing and small stores.....	1,487,205.89
Charged on account of naval hospital fund.....	129,941.74
Deposits by enlisted men checked on rolls.....	275,978.00
Unpaid labor June 30, 1910.....	1,837,006.09
Miscellaneous checkages on rolls.....	203,151.21
	<u>7,582,129.52</u>
Difference.....	<u>4,698,860.84</u>

Material employed for the manufacture and repair of articles for store (Title Z).

	Title V (leave, holiday, and incidental expenses). (See Tables 16 and 17.)	Title W (repairs to articles in store).	Issues to ships and incidental bills under Titles B, C, and Y.	Total.	Title Z (conversion account). (Includes articles drawn for repairs).	
1	165.94 726.94 779.50 309.25	\$84,760.40 1,932.81 14,559.39		\$283,935.19	\$538,259.99 484,749.20 142,146.61 121,528.59	\$116,336.41 234,367.26 43,328.60
2	577.02 524.39 210.05 107.00	138,580.96 56,177.47 4,025.17		1,371,958.67	969,286.34 2,072,115.41 416,723.06 253,022.88	330,325.99 1,276,192.11 245,460.12
3		2,258.27		58,023.39	51,827.09 117,310.74 136,855.77	1.76
4		20,983.61 1,715.37		182,369.47	207,989.93 323,663.81 88,692.46	97,912.56 94,347.64
5		463.12		1,472.27	5,776.72 2,630.40 994.34	
6	889.89 250.76 1,007.30 2,364.93	357,632.89 26,339.89 10,541.71		2,912,927.78	2,912,563.01 4,483,112.48 965,652.34 1,205,140.95	471,784.00 1,059,757.00 138,319.75
7	227.72 630.60 188.88 162.50	163,725.91 24,514.83 7,002.37		3,265,244.49	1,219,239.78 3,888,398.84 322,772.83 438,218.83	76,033.07 468,985.82 31,040.73
8					31,123.22 815.06 55,666.46	3.38 .59
9				101,216.75	447,311.93 299,740.06 361,927.57	
10		739.87		23,939.27	27,248.34 7,975.09	
11		466,303.82 29,460.60		2,703,015.68	1,506,070.71 3,257,681.94 361,417.61	1,892,374.68 4,544,784.50
12		13,835.93			169,141.53 291,392.79 84.38	160,568.34 921,423.04
13	41 2 1	196,123.38 11,631.49 21,289.15		3,204,705.74	1,560,653.77 3,933,110.38 433,158.29 606,000.12	184,988.90 391,032.88 76,700.64
14	C	32,304.58 2,081.91 3,830.45		348,585.22	301,043.51 471,777.15 130,788.54 191,979.21	10,898.15 27,028.62 4,166.14
15	P				7,343.71	
16	K	5,683.36		11,872.18	69,883.14 44,638.71 138,754.33	1,993.12 2,642.01
17	P	14,738.03		19,590.12	128,641.19 61,762.59 18,699.78	7,596.50 11,585.79
18	N	7,438.99		4,622.04	132,796.18 51,163.18 23,332.03	6-2.39 317.82

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employed for the manufacture and repair of articles for store (Title Z)—Continued.

1917 (maintenance of ships and repairs, care and preservation of ships ordinary.) (See Tables 16 and 15.)	Title V (leave, holiday, and incidental expenses). (See Tables 16 and 17.)	Title W (repairs to articles in store).	Issues to ships and incidental bills under Titles B, C, and Y.	Total.	Title Z (conversion account). (Includes articles drawn for repairs).	
	\$1,978.97			\$49,166.25		19
			\$16,903.50	61,878.61		
98,116.16	163,370.33			1,460,632.80	\$210,221.39	20
25,247.14	35.36		2,740,102.59	3,570,876.72	548,492.91	
20,880.66	10,693.26			611,010.80	141,509.14	
72,231.05	86,581.55			515,934.75		21
19,335.06	7,146.38		1,045,762.79	1,097,153.70	101,846.95	
				1,581,869.61	372,986.21	22
	1,356.97			532,038.60		
				66,100.02		23
	3,656.97			6,627.34		
				253,904.88		
				65,819.49		24
			3,646.81	33,360.58		
				600,786.87		
				6,404.02		25
			40,709.35	4,934.02		
				264.16		
				27,049.06		26
			10,553.43	45,978.26		
				23,958.78		
	3,045.04			10,866.23		27
			130,420.93	7,448.97	153.26	
				77,638.40	3.50	
	1,283.99			190,156.76		28
			6,157.45	9,527.87		
				27,757.01		29
			13,424.63	13,139.10		
				14,041.12		
	22,955.51			4,011.68		30
	329.39		137,261.64	20,754.73	7,253.59	
				597.16	38,321.18	
	77,500.76			81,533.07		31
	10,945.09		1,184,135.25	741,802.58	110,252.48	
				1,718,813.26	266,158.89	
	1,821.37			87,889.10		32
				17,123.72	3,142.20	
				2,754.08	382,009.41	
	589.07			11,460.84		33
				9,516.54		
				6,230.47		
	5,197.41			52,999.60	12,246.79	34
				19,501.41	368,057.79	
	9,541.48					35
				76,125.55	32,845.26	
				19,939.39	1,283,192.43	
				1,954.08		36
	1,375.40			17,752.51	830.51	
				15,037.49	43,161.70	
				19,133.36		37
	8,018.75			107,210.61	14,664.79	
				39,993.10	2,397,559.11	
				1,135.15		

T employed for the manufacture and repair of articles for store (Title Z)—Continued.

	Title V (leave, holiday, and incidental expenses). (See Tables 16 and 17.)	Title W (repairs to articles in store).	Issues to ships and incidental bills under Titles B, C, and Y.	Total.	Title Z (conversion account). (Includes articles drawn for repairs).
38	\$2,130.60			\$44,210.32	
				29,699.55	
				987.04	
39	6,371.80			41,588.09	\$24,230.85
				12,932.11	1,095,495.95
				7,254.95	
40				106,971.02	
41	3,975.00		\$15,123.88	83,079.21	19.85
				85,407.35	14.69
				17,402.59	
42	996.92		312,527.67	42,350.60	
	.40			359,862.19	
				1,018,515.95	
43			25,929.40	21,813.43	
				43,411.36	
				2,427.89	
44			39,025.35	39,168.65	
				37,579.67	
45			4,853.87	5,857.27	
				3,793.10	
46				7,370.80	
				6,495.04	
				4,555.71	
47				28,983.47	
				6,225.24	
				64,370.64	
48				780.10	
49				4,053.12	
50				2,168.89	
51				59,801.27	
				41,033.14	
52			2,830,582.99	2,830,582.99	
53			585.43	585.43	
54	2,651,111.48	\$19,753.17	5,090,615.40		
54.54	1,986,581.23			14,711,293.80	6,898,667.17
54.56	173,050.85		23,051,185.31	21,000,565.61	15,738,518.84
54.58	63,891.16			3,012,252.47	680,525.12
54.78	2,651,111.48	19,753.17	5,090,615.40	35,770,665.77	
54.86	4,794,634.73	19,753.17	28,141,800.71	84,494,780.65	20,287,711.13

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and material employed for the manufacture and repair of articles for store (Title Z.)

Title T (maintenance tugs and floaters, care and preser- vation of ships in ordi- nary). (See Tables 14 and 15.)	Title V (leave, holiday, and incidental ex- penses). (See Tables 16 and 17.)	Title W (re- pairs to arti- cles in store).	Issues to ships and incidental bills under titles B, C, and Y.	Total.	Title Z (con- version ac- count (includes articles drawn for repairs).
\$8,959.08	\$180,752.00			\$881,231.41	\$3,085.20
827.60	11,612.46			481,855.23	642.40
361.58	52,135.57			144,388.88	646.02
	1,732.40	\$15.00		72,700.59	
	332.23			76,261.08	
				13.49	
				10.35	
	2,403.03			330,185.84	34.83
	3.75			175,447.60	686.41
	107.21			82,398.37	8.42
	1,123.57			54,335.53	
				9,952.06	
	372.47			15,838.79	
				11,976.32	
				1,816.50	
				300.00	
	91.00			91.00	
	9.35			8,326.64	
				8,667.99	
				65.92	
				54,291.30	
				40,081.41	
				32,066.35	
				19,301.00	
				141,214.12	
	317.62			34,990.78	
				13,021.62	
				8,379.03	
				806,426.94	
				54,426.06	
				97,384.32	
				242,842.94	
	394.08			18,718.77	
				10,333.14	
				19,672.60	
				83,086.48	
				90,080.37	
				295,864.65	
				15,001.88	
				12,154.24	
				94,124.96	
				11,233.29	
	19.03			493.64	
				407.74	
				132,956.27	
				4,326.11	
				1,273.74	
				1,895.50	
				34,379.44	
				6,649.87	
				17,312.87	
				22,493.34	
				20,556.63	
				1,824.71	
				236,097.07	
				36,705.08	
				34,588.61	
				261,522.66	

labor and material employed for the manufacture and repair of articles for store

Title T Maintenance tools and equipment, care and repair, and preservation of tools in ordi- nary use. (See Tables 14 and 15.)	Title V (leave, holiday, and incidental ex- penses). (See Tables 16 and 17.)	Title W (re- pairs to arti- cles in store).	Issues to ships and incidental bills under titles B, C, and Y.	Total.	Title Z (con- version ac- count (includes articles drawn for repairs).	
	\$44.40			\$1,753.63		18
				582.86		
				589.33		19
				697.19		
				108.75		20
				5,022.10		
				5,871.28		21
	7,166.89			48,559.21	\$2,770.44	
				28,169.67		22
				73,612.26		
				16,069.94		23
				21,646.25		
				1,459.24		24
	181.00			8,435.19		
				18,104.64		25
				948,658.64		
				1,332.93		26
				2,515.68		
				39.50		27
	369.44			369.44		
				112,143.99		28
				7,536.40		
				5,897.34		29
				641.24		
				81,541.68		30
				2,462.97		
				69.38		31
				115,542.12		
	5,323.27			31,876.94		32
	4,473.05			4,473.05		
0,450.82	115,623.72			617,283.11	203,189.22	33
4,271.36	34,812.52		\$2,465,161.99	3,156,321.79	694,601.74	
3,449.68	2,540.89			151,219.65	111,295.03	34
3,047.75	22,951.74	\$9,965.19	157,610.56	282,080.50		
7.00	5,269.57	2,544.11	8,991.69	18,367.69		35
	707.60	93.00		7,762.18		
6,797.50	8,802.89			260,576.53	2,987.50	36
3,679.93			2,914,447.52	3,127,012.62	8,011.88	
182.31				473.12	1,506.14	37
	11,286.52		351,908.85	444,888.19		
	4,556.94		9,679.14	60,003.58		38
	12,340.36			12,340.36		
				208.15		39
	10.00		8.40	158.45		
	48.50			591.31		40
	40.45			199.87		
				40.45		41
	431.79			6,278.48		
	501.27		505.35	3,608.50		42
	16,887.97	243.75		115.70		
	6,600.62	4.50		17,215.72		43
	1.29			6,613.12		
				1.29		44
				229.92		
				48,240.75		34

material employed for the manufacture and repair of articles for store

Title V (leave, holiday, and incidental expenses). (See Tables 16 and 17.)	Title W (repairs to articles in store).	Issues to ships and incidental bills under titles B, C, and Y.	Total.	Title Z (conversion account (includes articles drawn for repairs).	
			\$7,758.65		35
			38.08		
\$256,598.17			1,151,343.95	\$816,901.00	36
45,624.16		\$7,685,455.14	8,408,053.20	6,417,621.72	
5,632.29			123,928.33	59,985.08	37
8,745.26	\$899.16	10,800.78	30,237.26		
1,473.11	2,242.55	5,144.10	25,014.94		38
137.44			137.44		
197.81			11,745.36	155.18	39
			14,628.36	827.91	
			16.66	48.81	40
			1,027.88		
			607.08		41
			695.04		
579.58			1,539.34		42
54.64			248.42		
2.55			2.55		43
17.04			3,364.58	98.01	
			842.20	8.96	44
			6,162.00		
			1,523.08		45
			2,918.82		
38,349.62			38,810.51	325,864.90	46
1,678.90			11,218.27	860,100.09	
3,098.90			3,098.90		47
410.56			8,857.37		
			30,310.71		48
		49.04	49.04		
231.84			2,179.14	3,594.85	49
			469.27	734.71	
			1,033.80	462.53	50
			2,400.00		
			8.92		51
7,799.40			41,774.08	51,644.02	
			47,399.95	39,193.65	52
22,366.57			61,290.79	187,545.70	
		912,766.81	1,005,552.14	1,778,971.54	53
4,525.89			12,950.03	44,817.55	
			826.46	1,099,310.68	54
6,049.63			6,360.19	9,572.25	
1,169.59			1,298.74	92,649.19	55
			363.90		
			29,628.60		56
692.13			1,539.87	1,559.59	
143.92			29,958.57	2,782.81	57
			6.13	744.70	
			9,780.84		58
			16,013.00		

labor and material employed for the manufacture and repair of articles for store

Title T maintenance of lugs and lighters, care and preser- vation of ships in ordi- nary). (See Tables 14 and 15.)	Title V (leave, holiday, and incidental ex- penses). (See Tables 16 and 17.)	Title W (re- pairs to arti- cles in store).	Issues to ships and incidental bills under titles B, C, and Y.	Total.	Title Z (con- version ac- count (includes articles drawn for repairs).	
	\$3,160.89			\$48,805.27		52
				18,160.21		
				65,536.63		53
				515.18		
				5,430.90		54
				2,631.76		
				10,720.81		55
				4,414.94		
				178.21		56
				106,971.02		
	165.00			11,984.69		57
				13,108.06		
				1,135.15		58
				8,858.60		
				7,045.39		59
				987.04		
				203.14		60
				355.88		
				7,254.96		61
				4,191.61		
				7,512.47		62
				35.42		
				3,711.77		63
				7,655.36		
				1,954.08		64
				5,926.10		
	425.61			9,534.37		65
				19,133.36		
				81.76		66
				72.96		
\$199,236.94	478,038.82			3,716,482.86	\$242,484.23	67
22,024.64	20,102.70		\$1,393,203.38	2,839,095.29	638,222.08	
47,104.05	2,722.14			956,339.79	112,498.34	68
2,242.50	9,425.71	\$1,490.33	9,319.24	112,204.91		
	746.39	429.70	2,586.39	54,922.47		69
	18.58			18.58		
				1,785.53		70
				7,029.36		
				491.05		71
				2,100.99		
				8,713.94		72
				806.71		
	215.00			6,071.13		73
				2,406.11		
				1,791.74		74
				2,772.65		
				823.88		75
				6,001.81		
				4,504.51		76
				1,838.17		
				2,279.37		77
				7,886.98		
				7,093.56		78
				3,443.06		
				2,781.27		79
				12,687.93		

labor and material employed for the manufacture and repair of articles for store

Title T (maintenance repairs and overhauls, care and preservation of articles in ord- ers). (See Tables 14 and 15.)	Title V (leave, holiday, and incidental ex- penses). (See Tables 16 and 17.)	Title W (re- pairs to arti- cles in store).	Issues to ships and incidental bills under titles B, C, and Y.	Total.	Title Z (con- version ac- count (includes articles drawn for repairs).
				\$2,921.57	
				2,430.32	
				1,846.26	
				14,321.79	69
				716.93	70
				13,741.94	71
				1,252.67	
				494.31	
				55.00	72
				2,804.55	
				1,604.90	
				1,146.15	
				12,165.55	73
				1,619.35	
				3,000.96	74
13,687.26	\$341,237.89			2,285,253.14	\$296,095.28
19,608.00	15,784.34		\$1,528,099.54	2,743,126.29	621,807.72
29,396.58	4,971.59			735,219.66	136,140.89
249.93	5,289.34	\$126.25	84,900.39	107,953.46	
	441.29	15.00	16,254.93	74,497.99	
	261.31			427.09	
				2,922.68	
				26,199.82	
				1,615.11	
				363.00	76
				10,173.71	77
				3,559.45	
				11,548.41	
				1,639.77	
				980.00	78
				3,676.94	
				877.04	
				1,775.71	
				2,470.85	79
				4.00	
				2,677.42	
				.85	
				9,402.68	80
				103.11	
				63.00	
				87.83	
				2,745.80	81
				849.13	
				115.44	
				4,907.36	82
				9,752.06	
				5,466.72	
				5,248.32	
				12,527.15	84
				17.70	
				1,426.44	
				4,568.21	85
				240.92	
				4,056.28	86

labor and material employed for the manufacture and repair of articles for store

Title T maintenance of tugs and floats, care and preser- vation of ships in ordi- nary. (See Tables 14 and 15.)	Title V (leave, holiday, and incidental ex- penses). (See Tables 16 and 17.)	Title W (re- pairs to arti- cles in store).	Issues to ships and incidental bills under titles B, C, and Y.	Total.	Title Z (con- version ac- count (includes articles drawn for repairs).
116,924.05	\$66,230.58			\$949,065.68	
	2.42			3,373.61	
	112,633.59		\$3,746,248.69	1,041.93	
	3,449.02		70,659.49	3,967,235.37	
	139.77			76,510.75	
	1,186.82			139.77	
				23,203.05	
	241,340.07			4,107.91	
	195,145.68			211,340.07	
	15,947.26			195,145.68	
				15,947.26	
				1,955.33	\$160.78
500.43	8.98		25,581.12	97,689.08	85.12
					19.11
	19,408.01	\$50.78	4,068.20	40,952.19	
	2,644.99		526.79	11,362.12	
	24.09			24.09	
	613.52			153,157.46	
	4,169.35		3,973.42	1,004.00	
	474.42		136.78	177,863.67	
				7,322.14	
	44.02			12,638.76	
	1.56			7,721.91	
	4.34			3,578.21	
				16,857.42	
				4,528.01	
				265.93	
	.53			654.62	
	193.58		434.94	6,463.23	
				34.12	
	14,233.37		8,247.09	49,722.94	
	4,115.01		651.61	8,748.27	
				12.00	
				71,551.65	
				96,830.20	
				18,948.10	
				380.28	
				90.79	
				102,962.67	
				4,666.26	
				7.50	
	12,328.64			12,328.64	
	232.14			20,341.22	14.72
	4,471.52		2,774.83	27,089.94	236.50
				2,102.24	3.86
	40,600.81			40,600.81	
	13,644.31			13,644.31	
	77.98			77.98	
	925.11			931.51	3.59
	108,801.61			108,801.61	
	8,957.47			8,957.47	
	86.63			86.63	
				1,543.47	
	5,099.10			5,099.10	
	4,199.86			4,199.86	
	27.66			27.66	
	618,622.14			618,622.14	
	148,039.59			148,039.59	
	10,384.47			10,384.47	

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labor and material employed for the manufacture and repair of articles for store

Title T maintenance tugs and floats, care and preser- vation of floats in ord- er. (See Tables 14 and 15.)	Title V (leave, holiday, and incidental ex- penses). (See Tables 16 and 17.)	Title W (re- pairs to arti- cles in store).	Issues to ships and incidental bills under titles B, C, and Y.	Total.	Title Z (con- version ac- count (includes articles drawn for repairs).	
				\$823.44		
				63,923.90		121
				5,392.00		
				34,038.06		
				48,555.50		122
	\$1,970.72			16,238.91		
				6,487.30		
				22,470.94		123
				5,273.32		
				183,591.20		
\$1.12	2,744.63			145,818.67		
	2,196.24			44,079.59		
.45	100.00			1,484.87		124
	548,457.09		\$20,066.51	706,879.59		
	47,561.92		419.75	61,709.77		
	591.51			591.51		
				42.00		
	139,769.00			139,769.00		125
	77,705.77			77,705.77		
	9,658.64			9,658.64		
	8.08			8.08		
	89.05			89.05		
	2.70			2.70		126
	32,255.09			32,255.09		
	22,872.50			22,872.50		
	15.40			15.40		
	13,895.52			13,895.52		127
	9,476.16			9,476.16		128
	1,843.97			1,843.97		129
	258.31			258.31		130
				1,978.04		
				461.98		131
1.84	332.37			17,346.81	\$51,645.99	
747.61	20.00		753,633.06	790,141.58	215,722.65	
.80	32.99			7,277.16	37,587.80	132
	868.99		877.50	1,746.49		
	2,647.25			31,793.92		
				79,998.69		133
				9,550.92		
5.28	204,482.29			816,764.91	916,574.07	
96.41	9,709.76		4,644,622.68	5,045,184.30	2,142,689.80	134
2.21	31.41			19,781.45	571.59	
	11,102.13			5,334,800.65		
870.90	131,256.32			1,681,230.10	42,492.23	
10,319.37	22,430.62		707,714.04	1,815,889.81	69,640.56	135
342.23	140.09			708,181.92	18,462.14	
	30,263.79			11,327,948.77		
						136
				586,129.57		
				6,514.07	1,122.60	
			125.42	3,735.90	736.23	137
				4,686.90	83.55	
	867.01			1,682,557.69		

labor and material employed for the manufacture and repair of articles for store

Title T maintenance of tugs and floats, care and preser- vation of ships in ordi- nary: (See Tables 14 and 15.)	Title V (leave, holiday, and incidental ex- penses). (See Tables 16 and 17.)	Title W (re- pairs to arti- cles in store).	Issues to ships and incidental bills under titles B, C, and Y.	Total.	Title Z (con- version ac- count (includes articles drawn for repairs).
				\$1,784.91	
				121.13	
				644.83	
				128,113.39	\$1.76
	\$1,320.82			99,985.58	
	1,568.41			694.96	
	82.71			1,385,831.09	
	13,355.49				163,864.42
					1.46
			\$9,409.96	9,409.96	
	6,475.96			6,475.96	503,028.87
				152.00	1,050,463.25
	616.00			616.00	200,396.26
		\$1,643.85		1,643.85	
	20.08			17,397.94	128.44
			10,659.40	26,097.70	5.16
				6,632.55	64.85
				1,481,485.23	
	1,113.60			1,113.60	
\$456,064.64	1,906,581.23		23,051,185.31	14,711,293.80	3,868,667.17
124,417.65	173,050.86			31,000,565.61	15,738,518.84
87,993.68	63,891.15			3,012,262.47	680,625.12
5,549.18	2,050,983.01	14,424.31	4,975,538.73	34,713,593.55	
7.00	549,550.39	5,235.86	115,056.67	998,975.10	
	50,578.08	93.00		58,089.77	
				10.85	
674,013.06	4,794,634.73	19,753.17	28,141,800.71	84,494,780.65	20,287,711.13

STATEMENT B.
 TABLE 3.—Expenditures for the construction of new vessels (Title A), showing the appropriations concerned with such expenditures.

Ship.	Increase navy, navy, equipment.	Increase navy, armor and armament.	Steam machinery.	Increase navy, construction and machinery.	Increase navy, torpedo boats.	Sea-going tugs.	Increase navy, purchase of steam colliers.	Increase navy, colliers.	Grand total.
Ammen:									
Public bills.....				\$194,400.00					\$194,400.00
Arkansas:									
Permanent ordnance fittings.....		\$118,471.98							
Public bills.....		1,307,974.44		1,215,500.00					2,641,946.42
Baracuda:									
Public bills.....					\$227,370.00				227,370.00
Birmingham:									
Hull and fittings.....				2,375.82					
Public bills.....				36,737.41					39,113.23
Bonita:									
Hull and fittings.....				111.93					
Permanent ordnance fittings.....					1,429.57				
Auxiliary machinery.....				241.07	251.13				
Electric plant.....				6.16	97.62				
Interior communications.....					44.92				
Miscellaneous.....					3.69				
Total.....					734.63				
Burrows:									
Public bills.....				359.16	2,629.04				67,656.25
Carp:									
Public bills.....				266,000.00	60,724.75				266,000.00
Chester:									
Hull and fittings.....									
Electric plant.....				33.25					
Public bills.....				7.43					
Total.....									40.68
Cyclops:									
Public bills.....								\$586,129.57	586,129.57

STATEMENT B—Continued.

TABLE 3.—Expenditures for the construction of new vessels (Title A), showing the appropriations concerned with such expenditures—Continued.

Ship.	Increase navy, mavy, equip- ment.	Increase navy, armor and armament.	Steam machinery.	Increase navy, construction and machinery.	Increase navy, torpedo boats.	Sea-going tugs.	Increase navy, purchase of steam colliers.	Increase navy, col- liers.	Grand total.
Delaware:									
Hull and fittings.....				\$153,775.76					
Permanent ordnance fittings.....				844.50					
Engines.....		\$30,060.70		1,313.31					
Boilers.....				1,315.84					
Auxiliary machinery.....				20,720.70					
Electric plant.....	\$2,201.97			415.97					
Interior communications.....	5,078.76								
Wireless telegraphy.....	100.98								
Miscellaneous.....	1,170.34			3,808.12					
Total.....	8,613.05	30,060.70		182,254.29					\$900,225.09
Public bills.....		27,535.02		651,762.03					419,079.00
Drayton:				419,079.00					
Florida:									
Hull and fittings.....				1,881,020.57					
Permanent ordnance fittings.....		224,246.05		402,518.72					
Engines.....				23,854.48					
Boilers.....				90,512.40					
Auxiliary machinery.....				35,271.72					
Electric plant.....				8,390.79					
Interior communications.....				90,700.85					
Miscellaneous.....		1,068.83							
Total.....		224,344.88		2,539,329.53					3,959,341.45
Public bills.....		1,171,019.78		24,647.26					
Funser:									
Hull and fittings.....				1,745.28					
Permanent ordnance fittings.....		657.50		54.18					
Engines.....				795.29					
Boilers.....				13.92					
Auxiliary machinery.....				596.95					
Miscellaneous.....	18.10			419.84					
Total.....	18.10	657.50		3,628.46					113,662.86
Public bills.....				109,258.80					

C. Ayling:									
Hull and fittings.....			290.58						
Permanent ordnance fittings.....					\$1,280.19				
Engines.....			40.15		244.13				
Auxiliary machinery.....					61.98				
Electric plant.....	416.33				108.40				
Wireless telegraphy.....	60.27				3.35				
Miscellaneous.....	3,670.33				79.88				
Total.....	4,146.93		320.74		1,777.99				82,714.90
Public bills.....					70,489.33				
Hector:									
Hull and fittings.....									
Engines.....						\$5,084.57			
Auxiliary machinery.....						1,014.90			
Electric plant.....						1,281.90			
Interior communications.....						4,531.43			
Miscellaneous.....						823.69			
Total.....						878.11			
Public bills.....						780.37			
Total.....						563.36			
John:									
Hull and fittings.....			1,543.90						
Total.....						15,559.03			509,049.30
Public bills.....						493,490.17			
Watson:									
Hull and fittings.....			817.35						
Permanent ordnance fittings.....		312.53							
Auxiliary machinery.....			27.41						
Total.....			844.76						
Public bills.....						70,948.03			72,105.92
Yves:									
Hull and fittings.....									
Engines.....						4,123.48			
Auxiliary machinery.....						579.74			
Electric plant.....						3,164.88			
Interior communications.....						146.71			
Miscellaneous.....						448.61			
Total.....						446.29			
Public bills.....						8,503.50			
Total.....						494,483.07			543,076.57
Public bills.....			332,000.00						332,000.00

STATEMENT B—Continued.

TABLE 3.—Expenditures for the construction of new vessels (Title A), showing the appropriations concerned with such expenditures—Continued.

Ship.	Increase navy, navy, equipment.	Increase navy, armor and armament.	Steam machinery.	Increase navy, construction and machinery.	Increase navy, torpedo boats.	Sea-going tugs.	Increase navy, purchase of steam colliers.	Increase navy, colliers.	Grand total.
Michigan:									
Hull and fittings.....				\$52,636.58					
Permanent ordnance fittings.....		\$92,344.43		964.28					
Engines.....				1,088.96					
Boilers.....				3,936.35					
Auxiliary machinery.....				6,572.00					
Electric plant.....	\$4,162.96			9,655.72					
Interior communications.....	90.48			5,451.10					
Wireless telegraphy.....	450.17			1,133.24					
Miscellaneous.....	3,001.66	560.08		20,341.23					
Total.....	7,705.27	92,304.51		101,728.46					\$413,013.93
Public bills.....		15,300.43		196,263.26					
Michigan:									
Public bills.....				671.00					671.00
Public bills.....				157,250.00					157,250.00
Montana:									
Hull and fittings.....				6,870.78					
Engines.....				143.30					
Auxiliary machinery.....				3,301.83					
Interior communications.....				7,562.96					
Total.....				18,278.87					
Public bills.....				18,153.55					36,464.42
Public bills.....				296,000.00					296,000.00
Nebraska:									
Hull and fittings.....				496.13	\$1,170.49				
Permanent ordnance fittings.....					316.89				
Engines.....				229.36	127.22				
Auxiliary machinery.....					57.35				
Electric plant.....	369.34				36.47				
Miscellaneous.....	3,646.80				164.26				
Total.....	4,019.14			716.49	1,872.88				
Public bills.....					40,607.53				47,215.00

STATEMENT B—Continued.

TABLE 3.—Expenditures for the construction of new vessels (Title A), showing the appropriations concerned with such expenditures—Continued.

Ship.	Increase navy equipment.	Increase navy armor and armament.	Steam machinery.	Increase navy, construction and machinery.	Increase navy, torpedo boats.	Sea-coaling tugs.	Increase navy, purchase of steam colliers.	Increase navy, colliers.	Grand total.
Boston:									
Hull and fittings.....				\$453.61					
Permanent ordnance fittings.....		\$303.01							
Engines.....				98.06					
Boilers.....				268.87					
Auxiliary machinery.....				9.11					
Wireless telegraphy.....	\$303.43								
Miscellaneous.....				293.18					
Total.....	303.43	303.01		1,065.43					\$141,510.93
Public bills.....				139,839.06					
Comethuses:									
Hull and fittings.....				24,035.58					
Engines.....			\$54,984.60	20,974.29					
Boilers.....			19,875.58	84,820.35					
Auxiliary machinery.....			4,243.71	819.48					
Standing rigging.....				1,088.66					
Electric plant.....				2,364.58					
Interior communications.....				400.08					
Miscellaneous.....			36,844.75	12,603.21					
Total.....			116,148.64	147,256.23					270,731.53
Public bills.....				7,326.66					
1. 4d:									
Hull and fittings.....				989.96					
Permanent ordnance fittings.....		968.44							
Engines.....				298.20					
Boilers.....				35.90					
Auxiliary machinery.....				1,167.30					
Miscellaneous.....				71.84					
Total.....		968.44		2,563.48					111,481.38
Public bills.....				107,949.46					
1. 0e:									
Public bills.....				341,000.00					341,000.00
1. 0f:									
Hull and fittings.....				206.40					
Auxiliary machinery.....				33.22					

Interior communications.....	773.86								
Miscellaneous.....	143.62							9.27	
Total.....	917.48							338.08	
Public bills.....								76,497.48	
Salmon:									
Hull and fittings.....									\$181.74
Electric plant.....	35.97								
Total.....	35.97								181.74
Public bills.....									36,000.00
Skate:									
Public bills.....									227,370.00
Skylack:									
Public bills.....									150,000.00
Smith:									
Hull and fittings.....									
Permanent ordnance fittings.....									
Engines.....	235.45							1,412.47	
Boilers.....								140.21	
Auxiliary machinery.....								2,596.58	
Miscellaneous.....								1,378.52	
Total.....	235.45							4.38	
Public bills.....									5,492.66
Snapper:									
Hull and fittings.....									
Permanent ordnance fittings.....									
Engines.....									
Auxiliary machinery.....	380.25								
Electric plant.....									
Miscellaneous.....	3,551.43								
Total.....	3,881.68								
Public bills.....									63.17
South Carolina:									
Hull and fittings.....									
Permanent ordnance fittings.....									
Engines.....									
Boilers.....									
Auxiliary machinery.....									
Standing rigging.....	23.36								
Electric plant.....	2,654.28								
Interior communications.....	3,534.01								
Wireless telegraphy.....	195.82								
Miscellaneous.....	4,014.54								
Total.....	10,306.11								
Public bills.....									63.17
South Carolina:									
Hull and fittings.....									
Permanent ordnance fittings.....									
Engines.....									
Boilers.....									
Auxiliary machinery.....									
Standing rigging.....									
Electric plant.....									
Interior communications.....									
Wireless telegraphy.....									
Miscellaneous.....									
Total.....	104,700.70								
Public bills.....									63.17
Total.....									2,483.01
									52,624.75
									1,496.19
									223.24
									111.23
									13.18
									138.14
									491.03
									2,483.01
									52,624.75
									63.17
									56,888.66
									1,681.94
									1,140.13
									2,809.88
									13,483.46
									525.37
									3,329.18
									26,101.83
									104,700.70
									249,353.19
									485,202.66

STATEMENT B—Continued.

TABLE 3.—Expenditures for the construction of new vessels (Title A), showing the appropriations concerned with such expenditures—Continued.

Ship.	Increase navy, navy, equip- ment.	Increase navy, armor and armament.	Steam machinery.	Increase navy, construction and machinery.	Increase navy, torpedo boats.	Sea-going tugs.	Increase navy, purchase of steam collars.	Increase navy, col- liers.	Grand total.
Sterrett:				\$335,850.00					\$335,850.00
Public bills.....									
Sungay:									
Hull and fittings.....	\$57.55			113.89	\$1,503.53				
Permanent ordnance fittings.....					593.13				
Engines.....				17.21	175.29				
Auxiliary machinery.....					16.34				
Electric plant.....					42.48				
Interior communications.....					5.38				
Miscellaneous.....				6.51	646.77				
Total.....	4,170.32			137.61	2,953.12				39,660.90
Sturgeon:									
Public bills.....					32,394.75				150,000.00
Public bills.....									
Turnon:									
Hull and fittings.....				117.28	1,386.16				
Permanent ordnance fittings.....					404.26				
Engines.....				1.65	180.80				
Auxiliary machinery.....					86.61				
Electric plant.....					91				
Miscellaneous.....					821.92				
Total.....	4,294.41			118.93	2,880.66				39,688.55
Terry:									
Public bills.....					32,394.55				341,000.00
Public bills.....				341,000.00					
Tripp:									
Public bills.....									329,750.00
Tuna:									
Public bills.....					41,000.00				41,000.00
Utah:									
Permanent ordnance fittings.....	\$223,445.89								
Public bills.....	1,567,144.80			1,973,000.00					3,763,590.69

Vestal:									
Hull and fittings.....	175.96		17,016.25						
Permanent ordnance fittings.....									
Engines.....		\$1,370.81	• 185.36						
Boilers.....		152.43							
Auxiliary machinery.....		613.24	226.68						
Standing rigging.....			8.18						
Electric plant.....			• 1,821.98						
Interior communications.....		10,857.78	• 257.95						
Miscellaneous.....			• 558.88						
Total.....	175.96	12,994.26	14,426.94						27,597.10
Vulkan:									
Hull and fittings.....									
Engines.....									
Boilers.....									
Auxiliary machinery.....									
Standing rigging.....									
Electric plant.....									
Interior communications.....									
Miscellaneous.....									
Total.....									8,181.50
Walke:									
Public bills.....									493,511.99
Total.....			225,020.00						225,020.00
Warrington:									
Hull and fittings.....			20.70						
Public bills.....			332,040.00						332,020.70
Total.....			979,000.00						2,135,807.27
Wyoming:									
Permanent ordnance fittings.....		118,472.07							
Public bills.....		1,088,335.20							
Total.....	59,491.15	6,231,100.39	134,884.23	14,011,794.88	1,596,709.12	\$2,550.87	1,513,819.26	\$586,129.57	24,736,999.47

• Credit.

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Abarenda:					
Hull and fittings.....			\$32,339.20		
Engines.....				\$2,493.93	
Boilers.....				25,641.06	
Auxiliary machinery.....			882.60	3,128.66	
Electric plant.....	\$578.53		79.83		
Interior communications.....	255.54				
Wireless telegraphy.....	3.60				
Miscellaneous.....	17.08		750.36	1,472.84	
Total.....	1,154.75		34,051.99	32,736.49	\$67,943.23
Accomac:					
Hull and fittings.....			265.30		
Engines.....				17.76	
Total.....			265.30	17.76	283.06
Active:					
Hull and fittings.....			3,758.25		
Engines.....				604.39	
Boilers.....				660.81	
Auxiliary machinery.....			51.80		
Standing rigging.....	20.35				
Electric plant.....	231.63				
Miscellaneous.....			438.66	1,321.93	
Total.....	251.98		4,248.71	2,587.13	7,087.82
Adder:					
Hull and fittings.....	430.24		3,343.12		
Permanent ordnance fittings.....		\$16.48			
Engines.....				439.13	
Auxiliary machinery.....			971.96	180.13	
Electric plant.....	296.40				
Miscellaneous.....	60.33	157.88	236.05	1,346.74	
Total.....	194.17	174.36	4,551.13	1,966.00	6,885.66
Alleen:					
Hull and fittings.....			2,466.88		
Permanent ordnance fittings.....		12.55	12.76		
Engines.....				436.05	
Boilers.....				711.17	
Auxiliary machinery.....				207.41	
Standing rigging.....	44.82				
Electric plant.....	65.14		8.16		
Interior communications.....			18.58		
Miscellaneous.....	45.00			369.40	
Total.....	154.96	12.55	2,506.38	1,724.03	4,397.92
Ajax:					
Hull and fittings.....	3.38		38,510.27		
Engines.....				5,528.97	
Boilers.....				9,279.53	
Auxiliary machinery.....				9,068.11	
Standing rigging.....	85.74				
Electric plant.....	2,680.11			208.69	
Wireless telegraphy.....			22.38		
Miscellaneous.....	59.22		80.98	4,319.90	
Total.....	2,838.45		38,701.29	28,405.20	69,944.94
Alabama:					
Hull and fittings.....			27,142.89		
Permanent ordnance fittings.....		4,435.79	2,233.11		
Engines.....				7,982.04	
Boilers.....				1,963.27	
Auxiliary machinery.....			27.87	2,107.70	
Standing rigging.....	81.22				
Electric plant.....	862.73		69.12		
Interior communications.....	1,338.13		32.41		
Miscellaneous.....	520.15		798.04	4,680.02	
Total.....	2,742.23	4,435.79	30,303.44	16,733.03	54,214.49

• Credit.

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Albany:					
Hull and fittings.....	\$18.92		\$17,474.63		
Permanent ordnance fittings.....		\$285.65		\$125.83	
Engines.....				4,261.71	
Boilers.....				325.56	
Auxiliary machinery.....			970.35	2,112.06	
Standing rigging.....	63.15				
Electric plant.....	229.37	183.99	23.42	52.09	
Interior communications.....	2,022.61		5,810.64		
Miscellaneous.....			1,053.84	2,846.01	
Total.....	2,344.05	469.64	25,332.88	9,723.26	\$37,869.83
Alert:					
Hull and fittings.....			72.12		
Miscellaneous.....				14.51	
Total.....			72.12	14.51	86.63
Alexander:					
Hull and fittings.....	60.01		2,822.09		
Engines.....				586.16	
Boilers.....				197.23	
Auxiliary machinery.....			139.39	283.00	
Miscellaneous.....				132.92	
Total.....	60.01		2,961.48	1,499.31	4,520.80
Alice:					
Hull and fittings.....			3,085.00		
Engines.....				364.18	
Boilers.....				61.53	
Auxiliary machinery.....			97.38	374.96	
Miscellaneous.....			84.45		
Total.....			3,266.83	800.67	4,067.50
Alvarado:					
Hull and fittings.....			833.55		
Engines.....				228.71	
Auxiliary machinery.....				5.63	
Total.....			833.55	234.34	1,067.89
Amphitrite:					
Hull and fittings.....			8,621.12		
Permanent ordnance fittings.....		409.09			
Engines.....				630.45	
Boilers.....				984.61	
Auxiliary machinery.....			250.25	1,785.06	
Standing rigging.....	170.01		4.81		
Electric plant.....	322.33				
Interior communications.....				111.06	
Miscellaneous.....	83.28	16.14		1,630.90	
Total.....	576.50	485.83	8,876.18	5,142.71	15,081.22
Annapolis:					
Hull and fittings.....			25.83		25.83
Apache:					
Hull and fittings.....			5,499.71		
Engines.....				1,317.34	
Boilers.....				2,411.13	
Auxiliary machinery.....				621.65	
Standing rigging.....	108.10				
Electric plant.....	367.62				
Interior communications.....	86.26				
Miscellaneous.....	14.54			278.27	
Total.....	576.52		5,499.71	4,618.39	10,694.62

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Arayat:					
Hull and fittings.....			\$108.90		
Engines.....				\$17.46	
Boilers.....				637.95	
Auxiliary machinery.....				40.27	
Electric plant.....	\$250.06				
Total.....	250.06		108.90	695.68	\$1,054.64
Arethusa:					
Hull and fittings.....			17,202.77		
Engines.....				508.47	
Boilers.....				6,869.37	
Auxiliary machinery.....			1,488.37	5,309.98	
Standing rigging.....	910.61				
Electric plant.....	34.14				
Interior communications.....	7.84				
Miscellaneous.....			187.08	130.79	
Total.....	952.59		18,878.82	12,878.61	32,710.02
Atlanta:					
Hull and fittings.....			6,615.70		
Miscellaneous.....			112.13	104.34	
Total.....			6,727.83	104.34	6,832.17
Bagley:					
Hull and fittings.....			314.65		
Auxiliary machinery.....				237.11	
Total.....			314.65	237.11	551.76
Bailey:					
Hull and fittings.....			15,484.05	75.78	
Permanent ordnance fittings.....		\$225.13	443.54		
Engines.....				10,201.44	
Boilers.....				6,233.22	
Auxiliary machinery.....		358.40	337.69	8,627.50	
Standing rigging.....	67.96				
Electric plant.....	499.05				
Interior communications.....	783.41		46.04		
Miscellaneous.....	87.90		250.51	2,228.37	
Total.....	1,438.32	583.53	16,561.83	27,366.31	45,949.99
Bainbridge:					
Hull and fittings.....	8.66		2,494.34		
Permanent ordnance fittings.....		188.15		3,338.77	
Engines.....				1,967.51	
Boilers.....				1,139.07	
Auxiliary machinery.....		4,037.23	1,080.30		
Electric plant.....	425.26				
Interior communications.....	1,102.58				
Miscellaneous.....			54.75	1,637.74	
Total.....	1,536.50	4,225.38	3,620.39	8,083.09	17,474.36
Baltimore:					
Hull and fittings.....			86,289.41		
Permanent ordnance fittings.....		1,119.88	4.86		
Engines.....				4,001.02	
Boilers.....				37,322.31	
Auxiliary machinery.....			4,922.37	5,572.68	
Standing rigging.....	1,167.60		294.91		
Electric plant.....	12,011.31				
Interior communications.....	8,851.62		3,134.41		
Wireless telegraphy.....	977.13				
Miscellaneous.....	1,829.80		1,762.37	46,514.30	
Total.....	25,437.46	1,119.88	96,408.33	93,410.91	216,376.58

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Barney:					
Hull and fittings.....			\$2,660.31		
Permanent ordnance fittings.....		\$12.02	6.14		
Engines.....				\$801.83	
Boilers.....				2,565.21	
Auxiliary machinery.....			43.82	335.56	
Electric plant.....	\$5.62				
Interior communications.....	306.38				
Miscellaneous.....				1,280.18	
Total.....	312.00	12.02	2,710.27	4,988.78	\$8,023.07
Barry:					
Hull and fittings.....			4,851.78		
Permanent ordnance fittings.....		23.02			
Engines.....				2,210.91	
Boilers.....				456.69	
Auxiliary machinery.....		3,733.63	1,040.33	129.23	
Electric plant.....	153.43				
Interior communications.....	1,207.98				
Miscellaneous.....			61.99	2,829.39	
Total.....	1,361.41	3,756.65	5,954.10	5,626.22	16,698.38
Bennington:					
Hull and fittings.....			a 1,089.66		
Boilers.....				a 1,904.10	
Total.....			a 1,089.66	a 1,904.10	a 2,993.76
Biddle:					
Hull and fittings.....			2,559.68		
Permanent ordnance fittings.....		158.60			
Engines.....				2,039.63	
Boilers.....				660.34	
Auxiliary machinery.....			39.19	179.87	
Electric plant.....	399.80				
Miscellaneous.....			16.17	67.87	
Total.....	399.80	158.60	2,615.04	2,847.71	6,021.15
Birmingham:					
Hull and fittings.....	17.07		22,832.07	32.65	
Permanent ordnance fittings.....		700.52			
Engines.....				7,505.68	
Boilers.....				12,100.45	
Auxiliary machinery.....	109.80		861.49	7,351.54	
Standing rigging.....	2,459.71				
Electric plant.....	536.44				
Interior communications.....	461.63		760.02		
Wireless telegraphy.....	2,893.09		133.30		
Miscellaneous.....	339.51		149.80	416.68	
Total.....	6,817.25	700.52	24,736.68	27,407.00	59,661.45
Public bills.....	15,000.00				15,000.00
Blakely:					
Hull and fittings.....			1,782.31	405.92	
Permanent ordnance fittings.....		199.93			
Engines.....				245.88	
Boilers.....				69.72	
Auxiliary machinery.....				73.90	
Miscellaneous.....			124.16	99.45	
Total.....		199.93	1,906.47	894.87	3,001.27
Bonita:					
Hull and fittings.....			801.28		
Engines.....				254.70	
Auxiliary machinery.....				18.98	
Miscellaneous.....	512.05		359.65	3.44	
Total.....	502.05		1,160.93	277.12	1,940.10

a Credit.

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Boston:					
Standing rigging.....	\$1.50				\$1.50
Brooklyn:					
Hull and fittings.....			\$96.72		
Permanent ordnance fittings.....		\$21.94			
Auxiliary machinery.....				\$17.12	
Miscellaneous.....				165.87	
Total.....		21.94	96.72	182.99	301.65
Brutus:					
Hull and fittings.....			8,420.09	279.31	
Engines.....				680.33	
Boilers.....				561.06	
Auxiliary machinery.....			1,999.96	1,793.32	
Standing rigging.....			7.90		
Electric plant.....	207.00				
Interior communications.....	1,545.84		922.54		
Miscellaneous.....			543.93	677.44	
Total.....	1,753.44		11,894.42	3,991.46	17,639.32
Buffalo:					
Hull and fittings.....			15,988.44		
Engines.....				2,866.72	
Boilers.....				562.47	
Auxiliary machinery.....			63.38	1,656.09	
Standing rigging.....	69.93				
Electric plant.....	645.98		192.06		
Interior communications.....	79.57		73.49		
Miscellaneous.....	48.06		297.18	7,034.80	
Total.....	843.54		16,614.55	12,120.08	29,578.17
Caesar:					
Hull and fittings.....			3,655.96	13.35	
Engines.....				2,236.46	
Boilers.....				3,428.32	
Auxiliary machinery.....			267.56	1,900.61	
Standing rigging.....	800.72				
Electric plant.....	293.08				
Interior communications.....	6.98				
Wireless telegraphy.....	634.91				
Miscellaneous.....	16.05		1,802.30	769.58	
Total.....	1,751.74		5,725.88	8,338.32	15,815.94
California:					
Hull and fittings.....			42,978.84		
Permanent ordnance fittings.....		148.64			
Engines.....				37,422.89	
Boilers.....				9,053.33	
Auxiliary machinery.....			408.94	2,426.29	
Standing rigging.....	29.37				
Electric plant.....	6,909.61		2,098.31		
Interior communications.....	6,597.52		10,622.46		
Miscellaneous.....	115.38		24.22	3,271.32	
Total.....	13,651.88	148.64	56,132.77	52,173.83	122,107.12
Public bills.....			3,222.51		3,222.51
Callao:					
Public bills.....			1,442.72	888.06	2,330.78
Castine:					
Hull and fittings.....	27.67		4,680.32		
Permanent ordnance fittings.....		35.70	4.47		
Boilers.....				3,604.38	
Auxiliary machinery.....			232.32	897.25	
Electric plant.....	702.88		7.29		
Miscellaneous.....	1,738.06		64.00	1,301.23	
Total.....	2,468.61	35.70	4,988.40	5,802.86	13,295.57

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Celtic:					
Hull and fittings.....			\$21,966.98		
Auxiliary machinery.....				\$95.13	
Electric plant.....	\$41.67		3.75		
Interior communications.....	77.14		7.50		
Miscellaneous.....	42.38		214.72	2,514.78	
Total.....	6.91		22,192.95	2,609.96	\$24,809.82
Charleston:					
Hull and fittings.....	70.93		7,199.97		
Permanent ordnance fittings.....		\$229.85			
Engines.....				2,180.45	
Auxiliary machinery.....			56.85	1,875.45	
Electric plant.....	726.14	227.16	115.93		
Interior communications.....	19.56				
Wireless telegraphy.....	35.32				
Miscellaneous.....			34.35	2,409.62	
Total.....	851.95	457.01	7,407.10	6,474.52	15,190.58
Chattanooga:					
Hull and fittings.....	161.40		2,122.32		
Permanent ordnance fittings.....		483.55			
Engines.....				48.64	
Boilers.....				482.22	
Auxiliary machinery.....			652.65	555.54	
Interior communications.....	1,503.80				
Miscellaneous.....				1,647.52	
Total.....	1,665.20	483.55	2,774.97	2,733.92	7,657.64
Chauncey:					
Hull and fittings.....			2,988.72		
Permanent ordnance fittings.....		136.69			
Engines.....				353.67	
Boilers.....				2,246.67	
Auxiliary machinery.....		3,726.30	1,619.05	1,292.15	
Electric plant.....	682.30				
Interior communications.....	589.18				
Miscellaneous.....			94.37	1,582.80	
Total.....	1,271.48	3,862.99	4,702.14	5,475.29	15,311.90
Chester:					
Hull and fittings.....			14,104.29	214.36	
Permanent ordnance fittings.....		402.84			
Engines.....				6,603.48	
Boilers.....				637.39	
Auxiliary machinery.....			4.39	3,362.69	
Electric plant.....	439.04				
Interior communications.....	385.79		1,572.47		
Wireless telegraphy.....	31.50				
Miscellaneous.....	221.19	6.44		1,572.18	
Total.....	1,077.52	409.28	15,681.15	12,390.10	29,558.05
Cheyenne:					
Hull and fittings.....		42.22	5,650.21		
Permanent ordnance fittings.....		1,105.31			
Engines.....				220.67	
Boilers.....				1,483.82	
Auxiliary machinery.....			1,130.13		
Electric plant.....	273.49				
Interior communications.....	1,012.88		376.57		
Miscellaneous.....	126.79			758.06	
Total.....	1,413.16	1,147.53	7,156.91	2,462.55	12,180.15

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Chicago:					
Hull and fittings.....			\$16,251.50	\$63.85	
Permanent ordnance fittings.....		\$47.34	217.47		
Boilers.....				10,846.74	
Auxiliary machinery.....				2,805.06	
Electric plant.....	\$2,188.89		55.54		
Interior communications.....	290.72				
Miscellaneous.....	1,586.51		516.02	816.14	
Total.....	4,066.12	47.34	17,040.53	14,531.79	\$35,685.78
Chickasaw:					
Boilers.....				1,226.85	1,226.85
Choctaw:					
Hull and fittings.....			1,759.09		
Engines.....				2,075.27	
Boilers.....				933.29	
Auxiliary machinery.....			75.36	1,536.13	
Miscellaneous.....			1,142.07	99.57	
Total.....			2,976.52	4,644.56	7,621.08
Cincinnati:					
Hull and fittings.....			55,251.64		
Engines.....				35,961.70	
Boilers.....				33,644.84	
Auxiliary machinery.....			2,782.80	12,206.89	
Standing rigging.....	576.48				
Electric plant.....	8,747.95		2,417.05		
Interior communications.....	3,439.07		2,225.57		
Miscellaneous.....			896.95	4,904.92	
Total.....	12,763.50		63,574.31	86,718.35	163,056.16
Cleveland:					
Hull and fittings.....	203.81		1,235.07		
Permanent ordnance fittings.....		237.64			
Engines.....				526.46	
Boilers.....				846.63	
Auxiliary machinery.....			35.35	271.58	
Electric plant.....	1,478.06				
Interior communications.....	57.35				
Miscellaneous.....	19.15	131.35		706.09	
Total.....	1,758.37	368.99	1,270.42	2,350.76	5,748.54
Colorado:					
Hull and fittings.....			52,893.23	72.02	
Permanent ordnance fittings.....	70.29	4,831.26	8,526.73		
Engines.....				2,670.29	
Boilers.....				32,910.44	
Auxiliary machinery.....			1,149.35	23,183.58	
Electric plant.....	2,427.20		691.99	2,289.89	
Interior communications.....	4,059.55		4,873.49		
Miscellaneous.....	1,000.00	146.93	73.77	437.89	
Total.....	5,557.04	4,978.19	68,208.56	61,564.11	140,307.90
Columbia:					
Hull and fittings.....			1,304.25		
Permanent ordnance fittings.....		173.77			
Engines.....				31,801.52	
Boilers.....				10,146.63	
Auxiliary machinery.....			377.64	23,316.79	
Standing rigging.....	80.84				
Electric plant.....	4.44		83.91		
Miscellaneous.....			4,043.11	2,932.21	
Total.....	85.28	173.77	5,808.91	68,197.15	74,265.11
Concord:					
Interior communications.....	51.71				51.71

a Credit.

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Connecticut:					
Hull and fittings.....			\$84,180.38		
Permanent ordnance fittings.....		\$14,394.23	1,847.64		
Engines.....				\$5,638.62	
Boilers.....				2,189.51	
Auxiliary machinery.....			2,582.32	4,198.29	
Electric plant.....	\$37,273.22		2,502.10		
Interior communications.....	7,784.51	12.11	2,523.66		
Wireless telegraphy.....	1,053.92				
Miscellaneous.....	2,992.78		2,981.76	13,798.23	
Total.....	49,104.43	14,406.34	96,617.76	25,824.65	\$185,953.18
Constellation:					
Hull and fittings.....			3,910.92		3,910.92
Constitution:					
Hull and fittings.....			893.59		
Miscellaneous.....	30.84				
Total.....	30.84		893.59		924.43
Craven:					
Hull and fittings.....			1,376.21		
Engines.....				29.37	
Auxiliary machinery.....				1,175.48	
Electric plant.....	35.73				
Miscellaneous.....			7.44	42.70	
Total.....	35.73		1,383.65	1,247.55	2,666.93
Culgoa:					
Hull and fittings.....			8,919.60		
Engines.....				1,485.95	
Boilers.....				192.05	
Auxiliary machinery.....			1,121.10	4,406.40	
Standing rigging.....	62.10				
Electric plant.....	399.75				
Interior communications.....	722.23				
Wireless telegraphy.....	76.83				
Miscellaneous.....	32.67		24.34	3,296.25	
Total.....	1,293.58		10,065.04	9,440.65	20,799.27
Cumberland:					
Hull and fittings.....			6,842.68		
Boilers.....				158.64	
Auxiliary machinery.....			90.85	1,941.45	
Standing rigging.....	357.74				
Interior communications.....	10.16				
Miscellaneous.....				611.43	
Total.....	367.90		6,933.53	2,711.52	10,012.95
Cushing:					
Hull and fittings.....			420.17		
Engines.....				34.27	
Auxiliary machinery.....				72.94	
Total.....			420.17	107.21	527.38
Cuttlefish:					
Hull and fittings.....	7.28		3,357.31		
Permanent ordnance fittings.....		39.19			
Engines.....				562.15	
Auxiliary machinery.....			356.60		
Electric plant.....	476.48				
Miscellaneous.....	1,000.00			292.51	
Total.....	1,483.76	39.19	3,713.97	854.66	6,091.58

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Dahlgren:					
Hull and fittings.....			\$338.09		
Engines.....				\$11.35	
Auxiliary machinery.....				69.66	
Electric plant.....	\$67.29				
Miscellaneous.....				2.40	
Total.....	67.29		338.09	74.41	\$479.79
Dale:					
Hull and fittings.....	11.64		3,235.37		
Permanent ordnance fittings.....		\$23.98			
Engines.....				1,034.34	
Boilers.....				518.89	
Auxiliary machinery.....		4,039.66	1,339.92	1,850.91	
Electric plant.....	786.41				
Interior communications.....	888.89				
Miscellaneous.....			118.52	2,375.62	
Total.....	1,686.94	4,063.64	4,693.81	6,679.76	17,124.15
Davis:					
Hull and fittings.....			2,613.08		
Permanent ordnance fittings.....		8.69			
Engines.....				7,331.73	
Boilers.....				1,730.95	
Auxiliary machinery.....			325.05	1,402.03	
Electric plant.....	343.51		11.08		
Interior communications.....				24.97	
Miscellaneous.....			56.72	1,306.20	
Total.....	343.51	8.69	3,030.90	11,773.91	15,157.01
Decatur:					
Hull and fittings.....		134.37	8,009.06	303.39	
Permanent ordnance fittings.....		180.10			
Engines.....				1,490.66	
Boilers.....				8,507.15	
Auxiliary machinery.....				610.28	
Electric plant.....	1,126.53				
Interior communications.....	1,134.40		238.67		
Miscellaneous.....	2.24	125.50	60.46	1,241.85	
Total.....	2,263.17	439.97	8,308.19	12,153.33	23,164.66
Delaware:					
Hull and fittings.....			2,109.18		
Permanent ordnance fittings.....		47.80			
Engines.....				235.30	
Auxiliary machinery.....			420.13	190.77	
Miscellaneous.....	19.67			77.84	
Total.....	19.67	47.80	2,529.31	503.91	3,100.60
De Long:					
Hull and fittings.....	14.47	205.22	9,020.59	143.59	
Permanent ordnance fittings.....		623.50	5.55		
Engines.....				3,778.56	
Boilers.....			10.98	16,312.01	
Auxiliary machinery.....				824.85	
Electric plant.....	1,080.36				
Interior communications.....	229.83				
Miscellaneous.....	293.89	61.55	38.45	1,555.22	
Total.....	1,627.55	890.27	9,075.57	22,614.23	34,207.62
Denver:					
Hull and fittings.....			2,738.08		
Permanent ordnance fittings.....		84.90			
Engines.....				581.14	
Boilers.....				1,585.67	
Auxiliary machinery.....			261.67	133.36	
Interior communications.....	357.49				
Miscellaneous.....				731.71	

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Des Moines:					
Hull and fittings.....	\$1,809.94	\$940.85	\$32,623.78	\$6,955.98	
Permanent ordnance fittings.....		60.79	1,151.43		
Engines.....	279.93			3,597.90	
Boilers.....				6,064.07	
Auxiliary machinery.....	4.93		1,252.55	6,425.94	
Standing rigging.....			63.29		
Electric plant.....	1,033.26		2,221.92	1,300.63	
Interior communications.....	11,045.15		5,076.82		
Wireless telegraphy.....	876.33				
Miscellaneous.....	637.75	324.50		219.55	
Total.....	15,607.48	1,326.14	42,419.79	24,644.07	\$83,997.48
Detroit:					
Miscellaneous.....	32.25				32.25
Dixie:					
Hull and fittings.....			8,678.41		
Permanent ordnance fittings.....		2.66			
Engines.....				537.36	
Boilers.....				499.42	
Auxiliary machinery.....	1,135.52		346.53	2,893.79	
Standing rigging.....	2.22				
Electric plant.....	1,606.99				
Interior communications.....			1,316.87		
Wireless telegraphy.....	48.01		39.23		
Miscellaneous.....	326.08		422.55	1,101.71	
Total.....	3,118.82	2.66	10,803.59	5,032.28	18,957.35
Public bills.....				266.70	266.70
Dolphin:					
Hull and fittings.....			29,653.06		
Engines.....				2,857.63	
Boilers.....				2,281.51	
Auxiliary machinery.....			275.99	6,636.80	
Standing rigging.....	2,169.89				
Electric plant.....	689.72				
Interior communications.....	279.11				
Wireless telegraphy.....	239.15				
Miscellaneous.....	3,628.19		3,735.65	648.21	
Total.....	7,006.06		33,664.70	12,424.15	53,094.91
Don Juan de Austria:					
Public bills.....			2,138.61	935.00	3,073.61
Dorothea:					
Public bills.....	128.01		3,438.09	3,505.02	7,071.12
Dubuque:					
Hull and fittings.....	12.42		10,272.86		
Engines.....				378.84	
Boilers.....				1,462.08	
Auxiliary machinery.....			30.35	2,647.03	
Electric plant.....	431.61		896.03		
Interior communications.....	711.10		204.17		
Miscellaneous.....	100.36		3.13	876.74	
Total.....	1,255.49		11,316.54	5,364.69	17,936.72
Dupont:					
Hull and fittings.....			1,448.44		
Permanent ordnance fittings.....		238.13			
Engines.....				537.34	
Boilers.....				121.27	
Auxiliary machinery.....				118.19	
Electric plant.....	331.00				
Miscellaneous.....				68.55	
Total.....	331.00	238.13	1,448.44	845.35	2,862.92

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STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Eagle:					
Hull and fittings.....	\$66.44		\$8,902.35		
Engines.....				\$652.19	
Boilers.....				701.46	
Auxiliary machinery.....				499.58	
Interior communications.....	372.37				
Miscellaneous.....				497.13	
Total.....	438.81		8,902.35	2,350.16	\$11,691.32
Eagle:					
Hull and fittings.....			113.40		
Miscellaneous.....	15.31				
Total.....	15.31		113.40		128.71
Elcano:					
Hull and fittings.....	25.21		5,352.26		
Permanent ordnance fittings.....	130.92				
Engines.....				3,742.49	
Boilers.....				938.55	
Auxiliary machinery.....			299.95	4,635.63	
Electric plant.....	566.78				
Interior communications.....	378.86			62.18	
Wireless telegraphy.....	50				
Miscellaneous.....		\$92.28	496.05	273.64	
Total.....	1,092.27	92.28	6,088.26	9,652.49	16,925.80
Elfrida:					
Hull and fittings.....			1,854.85		
Permanent ordnance fittings.....		95.50	736.11		
Engines.....				832.12	
Boilers.....				14.80	
Auxiliary machinery.....				154.06	
Standing rigging.....	717.35				
Electric plant.....	705.33				
Interior communications.....	14.72				
Miscellaneous.....				277.25	
Total.....	1,437.40	95.50	2,590.96	1,278.23	5,402.09
Enterprise:					
Auxiliary machinery.....			14.08	185.46	
Total.....			14.08	185.46	199.54
Ericsson:					
Hull and fittings.....			416.13		
Engines.....				644.86	
Auxiliary machinery.....				80.48	
Total.....			416.13	725.34	1,141.47
Essex:					
Public bills.....			252.54	2,197.99	2,450.53
Farragut:					
Hull and fittings.....			6,877.39		
Engines.....				1,642.72	
Boilers.....				18,743.04	
Auxiliary machinery.....				1,619.91	
Standing rigging.....	270.44				
Electric plant.....	305.29		39.92		
Interior communications.....	619.14		217.47		
Miscellaneous.....			106.18	984.66	
Total.....	1,194.87		7,261.96	22,993.33	31,450.16
Plummer:					
Hull and fittings.....			595.59		
Permanent ordnance fittings.....		70.26			
Engines.....				138.03	
Auxiliary machinery.....				283.69	
Miscellaneous.....				21.10	
Total.....		70.26	595.59	422.88	1,088.64

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Foote:					
Hull and fittings.....			\$351.52		
Electric plant.....	\$7.41				
Miscellaneous.....				\$49.68	
Total.....	7.41		351.52	49.68	\$498.61
Fortune:					
Hull and fittings.....			6,719.44		
Engines.....				1,030.73	
Boilers.....				940.15	
Auxiliary machinery.....			19.04	1,578.97	
Electric plant.....			16.80		
Miscellaneous.....	30.95		210.59	1,288.36	
Total.....	30.95		6,965.87	4,838.21	11,835.03
Fox:					
Hull and fittings.....			3,327.71		
Permanent ordnance fittings.....		\$34.86			
Engines.....				3,782.78	
Boilers.....				7,345.83	
Auxiliary machinery.....			181.27	2,384.71	
Standing rigging.....	103.70				
Electric plant.....	225.40				
Interior communications.....			41.35		
Miscellaneous.....			68.42	1,080.80	
Total.....	389.10	34.86	3,618.75	14,594.12	18,636.83
Franklin:					
Hull and fittings.....			2,791.77		
Auxiliary machinery.....				280.46	
Electric plant.....	2,826.99		359.67		
Miscellaneous.....			150.43	246.78	
Total.....	2,826.99		3,301.87	527.24	6,656.10
Galveston:					
Hull and fittings.....	2.72		328.46		
Permanent ordnance fittings.....		461.50			
Engines.....				18.95	
Boilers.....				290.47	
Auxiliary machinery.....			11.99	86.84	
Electric plant.....	414.61				
Interior communications.....	7.25				
Miscellaneous.....	11.99	162.87	154.65	2,562.27	
Total.....	436.57	624.37	495.10	2,928.53	4,484.57
Public bills.....				4,550.73	4,550.73
General Alava:					
Hull and fittings.....			2,875.28		
Engines.....				5.00	
Miscellaneous.....				42.94	
Total.....			2,875.28	47.94	2,923.22
Georgia:					
Hull and fittings.....			38,695.71		
Permanent ordnance fittings.....		16,365.62	1,278.60		
Engines.....				14,149.51	
Boilers.....				14,180.50	
Auxiliary machinery.....			5,183.06	13,631.10	
Electric plant.....	10,552.58		1,823.70		
Interior communications.....	462.60		7,968.32	169.42	
Wireless telegraphy.....			5.28		
Miscellaneous.....	2,750.72	225.63	4,868.22	5,463.51	
Total.....	13,765.90	16,591.25	59,822.80	47,614.04	137,704.08

STATEMENT B—Continued.

TABLE A.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Glacier:					
Hull and fittings			\$23,183.35		
Engines				\$2,902.90	
Boilers				1,583.02	
Auxiliary machinery			2,452.65	13,022.80	
Standing rigging	\$1,072.68				
Electric plant	696.32		450.55		
Wireless telegraphy	14.20				
Miscellaneous				5,130.27	
Total	1,783.20		26,086.55	22,608.99	\$50,568.74
Gloucester:					
Hull and fittings	238.73	\$243.00	10,178.16	2,519.43	
Permanent ordnance fittings		58.42	31.25		
Engines				1,505.42	
Boilers				2,127.62	
Auxiliary machinery	492.38		204.43	2,864.62	
Standing rigging				85.55	
Electric plant	108.45		39.70		
Interior communications	400.09				
Miscellaneous	28.94		.25	814.20	
Total	1,268.59	301.42	10,539.34	9,831.29	21,940.64
Goldsbrough:					
Hull and fittings			2,248.40		
Engines				2,064.94	
Boilers				72.59	
Auxiliary machinery			3.63	370.45	
Electric plant	60.05		60.62		
Interior communications	720.32		205.36		
Wireless telegraphy	180.51		12.41		
Miscellaneous			37.94	981.85	
Total	960.88		2,568.36	3,489.83	7,019.07
Public bills				210.00	210.00
Gopher:					
Public bills	149.50		9,516.83	1,788.94	11,455.27
Grampus:					
Hull and fittings	44.59		2,850.81		
Engines				2,827.76	
Auxiliary machinery			1,029.51		
Electric plant	1,475.18		51.02		
Miscellaneous	5.28		13.64	106.68	
Total	1,525.05		3,944.98	2,934.44	8,404.47
Grayling:					
Hull and fittings			767.74		
Engines				908.76	
Miscellaneous	677.30		329.56	36.41	
Total	677.30		1,097.30	945.17	2,719.77
Hancock:					
Hull and fittings			5,062.45		
Engines				926.30	
Boilers				68.19	
Auxiliary machinery				549.15	
Electric plant	4,459.16				
Miscellaneous				26.89	
Total	4,459.16		5,062.45	1,570.53	11,092.14
Hannibal:					
Hull and fittings			5,737.68		
Engines				1,886.34	
Boilers				2,045.91	
Auxiliary machinery			1,255.03	656.91	
Interior communications			14.97		
Miscellaneous			135.03	911.83	
Total			7,142.71	5,800.99	12,943.70

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Hartford:					
Hull and fittings.....			\$3,585.27	\$35.02	
Engines.....				538.53	
Boilers.....				1,129.81	
Auxiliary machinery.....				840.01	
Standing rigging.....	\$2,057.10				
Electric plant.....	183.83				
Interior communications.....	48.23				
Miscellaneous.....	173.21		27.17	62.98	
Total.....	2,462.37		3,612.44	2,606.35	\$8,681.16
Hector:					
Hull and fittings.....	4.93		3,246.45		
Engines.....				59.91	
Boilers.....				454.34	
Auxiliary machinery.....			97.55	1,303.98	
Standing rigging.....	30.14				
Electric plant.....	84.65				
Interior communications.....	188.68		81.87		
Miscellaneous.....			.48	101.26	
Total.....	308.40		3,426.35	1,919.49	5,654.24
Helena:					
Hull and fittings.....			118.48		
Permanent ordnance fittings.....		\$592.83	89.80		
Interior communications.....	152.46				
Miscellaneous.....				69.57	
Total.....	152.46	592.83	208.28	69.57	1,023.14
Public bills.....			904.12	166.05	1,070.17
Hercules:					
Hull and fittings.....			3,586.17		
Engines.....				402.84	
Boilers.....				849.36	
Auxiliary machinery.....			3.77	168.92	
Interior communications.....	2.33				
Miscellaneous.....			19.50	16.37	
Total.....	2.33		3,009.53	1,437.49	5,049.35
Hlst:					
Hull and fittings.....	248.50		10,159.42		
Engines.....				87.48	
Boilers.....				1,034.53	
Auxiliary machinery.....				644.81	
Electric plant.....	55.36				
Miscellaneous.....	3.86		7.91	402.71	
Total.....	307.81		10,167.33	2,169.53	12,644.67
Hopkins:					
Hull and fittings.....			2,043.51		
Engines.....				2,382.05	
Boilers.....				737.19	
Auxiliary machinery.....			38.41	1,761.70	
Electric plant.....	1.80		6.52		
Interior communications.....	1,049.33		267.25		
Miscellaneous.....			78.49	206.67	
Total.....	1,051.13		2,434.18	5,087.61	8,572.92
Public bills.....				75.40	75.40
Hornet:					
Hull and fittings.....			4,857.36		
Boilers.....				626.39	
Auxiliary machinery.....			139.02	200.00	
Miscellaneous.....			175.29		
Total.....			5,171.67	826.99	5,998.66

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Hull:					
Hull and fittings.....			\$3,530.38		
Engines.....				\$3,404.08	
Boilers.....				845.76	
Auxiliary machinery.....			69.00	1,583.88	
Electric plant.....	\$50.10				
Interior communications.....	1,071.27		277.16		
Miscellaneous.....			94.23	204.20	
Total.....	1,121.37		3,970.77	6,037.92	\$11,130.06
Huntress:					
Public bills.....			1,398.82	521.35	1,920.17
Idaho:					
Hull and fittings.....			34,789.67		
Permanent ordnance fittings.....		\$3,967.78	10.08		
Engines.....				35.71	
Boilers.....				3,465.07	
Auxiliary machinery.....			2,519.88	1,649.03	
Standing rigging.....	67.57				
Electric plant.....	8,721.30		2,848.58		
Interior communications.....	515.97		6,491.27		
Wireless telegraphy.....	120.64				
Miscellaneous.....	17,006.95		4,177.17	1,876.02	
Total.....	26,432.43	3,967.78	50,830.65	7,025.83	88,262.69
Public bills.....			82.50		82.50
Illinois:					
Hull and fittings.....	1,146.77	627.88	17,826.10	760.08	
Permanent ordnance fittings.....		8,661.76	5,066.72		
Engines.....				16,023.69	
Boilers.....				12,250.64	
Auxiliary machinery.....			6,058.52	24,811.82	
Standing rigging.....	9.10				
Electric plant.....	3,590.87				
Interior communications.....	1,427.04		7.56		
Miscellaneous.....	458.78	2,925.52	4,256.68	27.74	
Total.....	6,632.56	12,215.16	33,215.58	53,873.97	105,937.27
Independence:					
Hull and fittings.....			205.90		
Boilers.....				10.53	
Auxiliary machinery.....				1,028.64	
Miscellaneous.....	140.73			16.09	
Total.....	140.73		205.90	1,055.26	1,401.89
Indiana:					
Hull and fittings.....			74,666.53		
Permanent ordnance fittings.....		18,864.82	4,552.68		
Engines.....				774.84	
Auxiliary machinery.....			9,683.04	79.06	
Standing rigging.....	220.70				
Electric plant.....	22,431.69		924.03		
Interior communications.....	9,123.20		14,983.13		
Wireless telegraphy.....	1,199.02				
Miscellaneous.....	2,318.06	7.62	7,912.39	1,694.96	
Total.....	35,292.67	18,872.44	112,731.80	2,548.86	169,445.77
Public bills.....				280.80	280.80
Intrepid:					
Hull and fittings.....			2,615.83		
Auxiliary machinery.....			111.47		
Standing rigging.....	576.72				
Electric plant.....	227.19				
Interior communications.....			9.79		
Miscellaneous.....				629.02	
Total.....	803.91		2,737.09	629.02	4,170.02

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Iowa:					
Hull and fittings.....			\$165,851.21		
Permanent ordnance fittings.....	\$880.31	\$31,499.13	6,630.28		
Engines.....				\$1,988.49	
Boilers.....				1,382.91	
Auxiliary machinery.....			123.18	13,017.24	
Standing rigging.....	22.76				
Electric plant.....	8,103.85		75.04		
Interior communications.....	12,668.79		35.64		
Wireless telegraphy.....	598.53				
Miscellaneous.....	130.06		51.40	2,802.48	
Total.....	22,404.30	31,499.13	172,766.75	19,191.12	\$245,861.30
Public bills.....			471.24	4,782.60	5,253.84
Iris:					
Hull and fittings.....	198.21		2,845.19		
Engines.....				677.53	
Boilers.....				2,679.71	
Auxiliary machinery.....				2,271.30	
Electric plant.....	81.37				
Miscellaneous.....			100.42	272.12	
Total.....	279.58		2,945.61	5,900.66	9,125.85
Public bills.....				105.00	105.00
Iroquois:					
Hull and fittings.....			6.75		
Miscellaneous.....				73.64	
Total.....			6.75	73.64	80.39
Public bills.....				495.00	495.00
Isla de Cuba:					
Public bills.....	67.00		1,302.40		1,369.40
Isla de Luzon:					
Hull and fittings.....			794.52	29.83	
Engines.....				181.21	
Boilers.....				152.20	
Auxiliary machinery.....				146.47	
Miscellaneous.....				70.82	
Total.....			794.52	580.53	1,375.05
Iwana:					
Hull and fittings.....	7.14		1,223.75	8.97	
Engines.....				680.29	
Boilers.....				335.08	
Auxiliary machinery.....			36.77	79.49	
Interior communications.....				150.32	
Miscellaneous.....	13.19		41.03	61.80	
Total.....	20.33		1,301.57	1,316.55	2,638.45
Justin:					
Hull and fittings.....			6,235.59		
Engines.....				3,085.62	
Boilers.....				417.91	
Auxiliary machinery.....			214.67	1,029.08	
Electric plant.....	256.37		52.66		
Miscellaneous.....				6.38	
Total.....	256.37		6,502.92	4,538.99	11,298.23
Kansas:					
Hull and fittings.....			26,474.12		
Permanent ordnance fittings.....		20,182.55	1,214.98		
Engines.....				6,442.19	
Boilers.....				1,220.47	
Auxiliary machinery.....			32,276.12	7,970.76	
Electric plant.....	7,271.38		6,495.09		
Interior communications.....			4,335.18		
Wireless telegraphy.....	148.02				
Miscellaneous.....	1,403.22		351.11	2,232.30	
Total.....	8,822.02	20,182.55	71,146.00	17,865.72	118,017.40

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Katahdin:					
Miscellaneous.....	\$67.56		\$366.70		\$434.26
Kearsarge:					
Hull and fittings.....			20,854.74		
Permanent ordnance fittings.....		\$4,222.97			
Engines.....				\$2,762.09	
Boilers.....				5,568.61	
Auxiliary machinery.....				3,420.04	
Standing rigging.....	126.95				
Electric plant.....	272.75		16.25		
Interior communications.....	63.84				
Miscellaneous.....	351.26		685.09	185.54	
Total.....	814.80	4,222.97	21,556.08	11,936.28	38,530.13
Kentucky:					
Hull and fittings.....			13,444.10		
Permanent ordnance fittings.....		6,051.45			
Engines.....				11,269.43	
Boilers.....				13,571.63	
Auxiliary machinery.....			1,403.94	14,827.60	
Electric plant.....	3,192.04				
Interior communications.....	241.19				
Miscellaneous.....	210.31		702.10	360.19	
Total.....	3,643.54	6,051.45	15,550.14	40,028.85	65,273.98
Lamson:					
Hull and fittings.....			525.12		
Engines.....				37.04	
Auxiliary machinery.....				191.58	
Total.....			525.12	228.62	753.74
Lancaster:					
Hull and fittings.....			631.63		
Boilers.....				1,744.34	
Electric plant.....			25.76		
Miscellaneous.....	215.26		31.12	639.79	
Total.....	215.26		688.51	2,384.13	3,287.90
Lawrence:					
Hull and fittings.....			3,415.38		
Permanent ordnance fittings.....		172.59			
Engines.....				4,126.56	
Boilers.....				3,242.72	
Auxiliary machinery.....			48.38	1,000.59	
Interior communications.....	962.50		206.12		
Miscellaneous.....			39.43	104.11	
Total.....	962.50	172.59	3,709.31	8,473.98	13,318.38
Lebanon:					
Hull and fittings.....			2,407.17		
Permanent ordnance fittings.....		36.50			
Engines.....				369.57	
Boilers.....				98.67	
Auxiliary machinery.....	137.64		506.60	345.10	
Electric plant.....	19.88				
Wireless telegraphy.....	40.63				
Miscellaneous.....	19.79		115.30		
Total.....	217.94	36.50	3,029.07	813.34	4,096.85
Leonidas:					
Hull and fittings.....	35.73		2,190.21		
Engines.....				421.22	
Boilers.....				1,011.62	
Auxiliary machinery.....			773.05	863.68	
Electric plant.....	86.63				
Miscellaneous.....	10.21		53.86	360.30	
Total.....	132.57		3,017.12	2,656.82	5,806.51

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations	Construction and repair.	Steam-machinery.	Total.
Lincoln:					
Hull and fittings.....			\$3,051.05		
Engines.....				\$742.42	
Boilers.....			231.71	879.23	
Auxiliary machinery.....			510.40	551.03	
Standing rigging.....	\$32.23				
Electric plant.....	72.84		54.16		
Miscellaneous.....			104.36	455.54	
Total.....	105.07		3,951.68	2,628.22	\$6,684.97
Louisiana:					
Hull and fittings.....			71,581.92		
Permanent ordnance fittings.....		\$22,522.51	4,700.48		
Engines.....				28,417.37	
Boilers.....				11,009.69	
Auxiliary machinery.....			2,520.20	26,116.22	
Electric plant.....	11,081.86		743.47		
Interior communications.....	7,226.16		11,592.12		
Wireless telegraphy.....	7.16				
Miscellaneous.....	2,389.14		247.38	1,026.76	
Total.....	20,704.32	22,522.51	91,385.57	67,769.04	202,381.44
Macdonough:					
Hull and fittings.....			4,484.17	761.04	
Permanent ordnance fittings.....				4.70	
Engines.....				2,356.04	
Boilers.....				789.27	
Auxiliary machinery.....				274.26	
Electric plant.....	354.56				
Interior communications.....	985.25		116.61		
Wireless telegraphy.....	3.00				
Total.....	1,342.81		4,600.78	4,185.31	10,128.00
Public bills.....			337.40		337.40
Mathias:					
Hull and fittings.....			4,627.45		
Permanent ordnance fittings.....		243.21			
Engines.....				337.72	
Boilers.....				405.72	
Auxiliary machinery.....				797.90	
Electric plant.....	437.58				
Interior communications.....	261.48		7.44		
Miscellaneous.....				744.74	
Total.....	699.06	243.21	4,634.89	2,286.08	7,863.24
Public bills.....			93.60		93.60
Mackenzie:					
Hull and fittings.....			387.63		
Engines.....				15.44	
Auxiliary machinery.....				53.36	
Total.....			387.63	68.80	456.43
Maine:					
Hull and fittings.....			47,023.88		
Permanent ordnance fittings.....		4,546.91			
Engines.....				10,293.42	
Boilers.....				20,475.03	
Auxiliary machinery.....			2,429.50	18,117.80	
Electric plant.....	5,896.95		9,242.15		
Interior communications.....	1,058.67		76.31		
Miscellaneous.....		555.75		19,747.57	
Total.....	6,955.62	5,102.66	58,771.84	68,663.82	139,493.94
Manila:					
Hull and fittings.....			637.28		637.28

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Manly:					
Hull and fittings.....			\$393.23		
Boilers.....				\$210.42	
Miscellaneous.....				81.52	
Total.....			393.23	291.94	\$685.17
Public bills.....			12.00		12.00
Marblehead:					
Hull and fittings.....			5,227.80		
Engines.....				1,870.55	
Boilers.....				577.59	
Auxiliary machinery.....				77.21	
Electric plant.....	\$210.03		293.53		
Interior communications.....	865.90		1,019.99		
Miscellaneous.....	216.96		824.77	827.39	
Total.....	1,292.89		7,366.09	3,198.32	11,857.30
Marcellus:					
Hull and fittings.....	157.44		8,292.97		
Engines.....				3,851.80	
Boilers.....				75.39	
Auxiliary machinery.....			350.10	980.28	
Interior communications.....	23.74				
Wireless telegraphy.....	17.95				
Miscellaneous.....	19.02			572.50	
Total.....	218.15		8,643.07	5,479.97	14,341.19
Marietta:					
Hull and fittings.....	242.39		17,113.01		
Engines.....				3,956.71	
Boilers.....				2,376.33	
Auxiliary machinery.....				4,042.00	
Electric plant.....	656.00		1,621.11		
Interior communications.....	1,526.55		384.26		
Wireless telegraphy.....	32.87				
Miscellaneous.....			35.54	4,211.20	
Total.....	2,458.41		19,153.92	15,186.24	36,798.57
Public bills.....				61.12	61.12
Mars:					
Hull and fittings.....			2,359.74		
Engines.....				470.25	
Boilers.....				819.37	
Auxiliary machinery.....			13.21	914.88	
Standing rigging.....	524.96				
Electric plant.....	42.38				
Miscellaneous.....	48.15			30.71	
Total.....	615.49		2,402.95	2,235.21	5,253.65
Maryland:					
Hull and fittings.....			43,288.88		
Permanent ordnance fittings.....		\$1,773.39			
Engines.....				27,047.69	
Boilers.....				31,967.07	
Auxiliary machinery.....			2,275.65	20,331.86	
Electric plant.....	14,321.98		2,305.67		
Interior communications.....	1,190.83		3,639.23		
Wireless telegraphy.....	88.00				
Miscellaneous.....	36.10			11,295.50	
Total.....	15,636.91	1,773.39	51,509.43	90,642.12	159,561.85
Public bills.....			3,222.51		3,222.51

• Credit.

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Massachusetts:					
Hull and fittings.....		\$5.83	\$17,181.28		
Permanent ordnance fittings.....		21,966.65	212.11		
Auxiliary machinery.....			2,145.67	\$62.29	
Standing rigging.....	a \$34.16				
Electric plant.....	a 1,010.48		255.52		
Interior communications.....	a 1,678.18		5.57		
Wireless telegraphy.....	302.66		35.67		
Miscellaneous.....	2,661.58		59.38	710.91	
Total.....	309.74	21,972.48	19,895.20	773.20	\$42,950.62
Massasoit:					
Hull and fittings.....			443.26	3.91	
Engines.....				38.72	
Boilers.....				172.99	
Auxiliary machinery.....				237.05	
Miscellaneous.....			29.89	108.26	
Total.....			473.15	560.93	1,034.08
Mayflower:					
Hull and fittings.....			14,481.36		
Engines.....				1,497.62	
Boilers.....				1,587.48	
Auxiliary machinery.....			1,978.90	2,851.28	
Electric plant.....	36.49				
Interior communications.....	512.92		27.75		
Miscellaneous.....	150.32		2,802.60	1,299.76	
Total.....	699.73		19,290.61	7,236.14	27,226.48
Public bills.....			110.25		110.25
McKee:					
Miscellaneous.....				30.56	30.56
Miantonomah:					
Hull and fittings.....			27.14		27.14
Michigan:					
Hull and fittings.....			4,298.85		
Permanent ordnance fittings.....		795.07			
Auxiliary machinery.....				566.31	
Electric plant.....	10.48				
Interior communications.....			90.84		
Miscellaneous.....	417.58	74.70	1,973.37	1,236.42	
Total.....	428.06	869.77	6,363.06	1,802.73	9,463.62
Milwaukee:					
Hull and fittings.....			1,030.86		
Permanent ordnance fittings.....	459.10	538.92	2,106.97		
Boilers.....				3,342.99	
Auxiliary machinery.....			33.81	570.17	
Electric plant.....	43.06			42.25	
Interior communications.....	1,439.30	41.07	4,174.35	15.95	
Miscellaneous.....				39.46	
Total.....	1,941.46	579.99	7,345.99	4,010.82	13,878.26
Mindoro:					
Hull and fittings.....	61.12		1,649.58		
Engines.....				1,068.32	
Boilers.....				92.65	
Auxiliary machinery.....				157.79	
Miscellaneous.....				118.85	
Total.....	61.12		1,649.58	1,437.61	2,148.31

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STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Minneapolis:					
Hull and fittings.....			\$1,404.76		
Permanent ordnance fittings.....		\$184.79			
Engines.....				\$3,346.11	
Bollers.....				6,260.49	
Auxiliary machinery.....			505.19	6,984.55	
Standing rigging.....	\$81.52				
Electric plant.....	665.51		764.36		
Interior communications.....			30.53		
Miscellaneous.....			591.65	2,916.87	
Total.....	747.03	184.79	3,296.49	19,508.02	\$23,736.33
Minnesota:					
Hull and fittings.....			65,964.37		
Permanent ordnance fittings.....		21,775.76			
Engines.....				4,068.44	
Bollers.....				140.17	
Auxiliary machinery.....			431.20	23,338.50	
Electric plant.....	9,431.58		804.96		
Interior communications.....	2,752.68		8,082.80		
Miscellaneous.....	627.42		84.18	2,569.90	
Total.....	12,811.68	21,775.76	75,367.51	30,117.01	140,071.96
Mississippi:					
Hull and fittings.....			38,024.70		
Permanent ordnance fittings.....		8,670.87	15.72		
Engines.....				2,541.13	
Bollers.....				425.41	
Auxiliary machinery.....			344.40	12,142.81	
Standing rigging.....	47.01				
Electric plant.....	7,418.46		2,369.74		
Interior communications.....	441.88		3,634.34		
Wireless telegraphy.....	161.35				
Miscellaneous.....	14,614.43	199.92	3,929.24	4,573.02	
Total.....	22,683.13	8,870.79	48,318.14	19,682.97	99,555.03
Public bills.....			94.50		94.50
Missouri:					
Hull and fittings.....	2,109.10	371.25	22,351.97	15.60	
Permanent ordnance fittings.....	54.97	5,351.80	6,430.74		
Engines.....				5,602.87	
Bollers.....				49,305.80	
Auxiliary machinery.....	20.33		2,325.21	31,205.28	
Standing rigging.....	587.02		69.03		
Electric plant.....	4,948.06	121.64	158.67		
Interior communications.....	2,382.69		13,709.93	334.87	
Miscellaneous.....	1,196.83	97.46	5,218.77	555.55	
Total.....	11,299.00	5,942.15	50,264.32	87,019.97	154,525.44
Moccasin:					
Hull and fittings.....	288.55		2,673.26		
Permanent ordnance fittings.....		15.46			
Engines.....				680.46	
Auxiliary machinery.....			1,169.19	151.85	
Electric plant.....	27.37				
Miscellaneous.....	49.05	4.28	176.71	1,327.84	
Total.....	364.97	19.74	3,959.16	2,160.15	6,504.02
Modoc:					
Engines.....				.61	
Auxiliary machinery.....			9.78	23.35	
Total.....			9.78	23.96	33.74
Mohawk:					
Hull and fittings.....			1,423.42		
Engines.....				757.76	
Bollers.....				263.81	
Auxiliary machinery.....			270.00	157.31	
Miscellaneous.....			605.36	15.56	
Total.....			2,298.81	1,194.44	3,493.25

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Mohican:					
Hull and fittings.....			\$4,676.52		
Auxiliary machinery.....				\$2,277.90	
Miscellaneous.....	\$60.30			310.36	
Total.....	60.30		4,676.52	2,588.26	\$7,325.08
Monadnock:					
Hull and fittings.....	404.50	\$7.13	45,276.59		
Permanent ordnance fittings.....		798.38			
Engines.....				1,017.22	
Boilers.....				1,709.08	
Auxiliary machinery.....			795.63		
Electric plant.....	2,473.94				
Interior communications.....	14.25				
Miscellaneous.....				2,448.98	
Total.....	2,892.69	805.49	46,072.22	5,235.28	55,005.68
Montana:					
Hull and fittings.....			27,759.51		
Permanent ordnance fittings.....		1,709.68			
Engines.....				7,298.65	
Auxiliary machinery.....			536.76	6,329.89	
Electric plant.....	739.54				
Interior communications.....	2,725.73		261.85		
Miscellaneous.....	2,066.73			1,985.30	
Total.....	5,532.00	1,709.68	28,558.12	15,613.84	51,413.64
Monterey:					
Hull and fittings.....	351.75		7,582.36		
Permanent ordnance fittings.....		992.94			
Engines.....				496.06	
Boilers.....				112.51	
Auxiliary machinery.....			517.04	1,304.77	
Electric plant.....	337.59		145.47		
Interior communications.....	23.63				
Wireless telegraphy.....	705.98				
Miscellaneous.....	35.90		88.50	1,904.19	
Total.....	1,454.85	992.94	8,333.37	3,817.53	14,598.69
Montgomery:					
Hull and fittings.....			5,460.20		
Permanent ordnance fittings.....		2,941.30			
Engines.....	108.96			1,564.18	
Boilers.....				1,931.36	
Auxiliary machinery.....			5,472.81	3,012.68	
Standing rigging.....			79.63		
Electric plant.....	1,337.27		256.41		
Miscellaneous.....	91.97		15.66	714.75	
Total.....	1,538.20	2,941.30	11,284.71	7,222.97	22,987.18
Nanshan:					
Hull and fittings.....	333.23		5,747.83		
Engines.....				1,379.12	
Boilers.....				476.34	
Auxiliary machinery.....			69.85	568.16	
Miscellaneous.....	79.40			1,526.65	
Total.....	412.63		5,817.69	3,950.27	10,180.59
Narkeeta:					
Hull and fittings.....			5,796.07		
Engines.....				172.99	
Boilers.....				15,644.14	
Auxiliary machinery.....			4.25	286.75	
Electric plant.....	138.95				
Interior communications.....			88.57		
Miscellaneous.....	70.35			112.20	
Total.....	209.30		5,888.89	16,216.08	22,314.27

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Narwhal:					
Hull and fittings.....			\$800.07		
Engines.....				\$248.19	
Auxiliary machinery.....			65.31		
Miscellaneous.....	\$993.99		352.47		
Total.....	663.99		1,217.85	248.19	\$2,130.03
Nashville:					
Public bills.....			604.41	807.90	1,412.31
Navajo:					
Hull and fittings.....			3,300.66	690.95	
Engines.....				2,422.09	
Boilers.....				3,628.80	
Auxiliary machinery.....			546.30	584.66	
Standing rigging.....	19.16				
Electric plant.....	398.25		37.18		
Miscellaneous.....	33.01			390.49	
Total.....	450.42		3,884.14	7,716.99	12,061.55
Nebraska:					
Hull and fittings.....			76,458.82		
Permanent ordnance fittings.....		\$13,265.53	756.43		
Engines.....				723.49	
Boilers.....				46.91	
Auxiliary machinery.....			98.96	22,421.34	
Standing rigging.....	198.56				
Electric plant.....	12,393.70		1,931.88		
Interior communications.....	10,431.93		18,747.49		
Wireless telegraphy.....	2,144.43				
Miscellaneous.....	8,688.37		513.63	10,576.74	
Total.....	33,856.99	13,265.53	98,507.21	33,768.48	179,398.21
Nero:					
Hull and fittings.....			55,847.96		
Miscellaneous.....	40.11		394.21	1,339.36	
Total.....	40.11		56,242.17	1,339.36	57,621.64
Public bills.....			1,175.00		1,175.00
Newark:					
Hull and fittings.....			235.92		235.92
New Hampshire:					
Hull and fittings.....	869.57		91,174.76		
Permanent ordnance fittings.....		5,828.25			
Engines.....				27,872.53	
Boilers.....				15.97	
Auxiliary machinery.....	31.89		1,089.70	126.01	
Standing rigging.....	486.29				
Electric plant.....	1,583.43	51.02	482.93		
Interior communications.....	6,787.19		4,972.14		
Miscellaneous.....	6,626.89	431.40		3,389.47	
Total.....	16,415.26	6,310.67	97,719.53	31,404.00	151,849.46
New Jersey:					
Hull and fittings.....			13,332.85	31.52	
Permanent ordnance fittings.....	77.00	2,557.15	1,530.52		
Engines.....	224.29			1,532.04	
Boilers.....				1,216.69	
Auxiliary machinery.....	195.42		1,175.97	2,398.92	
Standing rigging.....			2.64		
Electric plant.....	59.63		198.68		
Interior communications.....	879.69		1,469.56		
Miscellaneous.....	1,486.33	74.68	2,254.41	304.25	
Total.....	1,162.98	2,631.83	19,964.63	5,483.42	29,242.86

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STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
New Orleans:					
Hull and fittings.....			\$20,651.57		
Permanent ordnance fittings.....		\$20.50			
Engines.....				\$3,934.25	
Boilers.....				16,370.45	
Auxiliary machinery.....			226.30	.70	
Standing rigging.....	\$134.56				
Electric plant.....	2,392.47	44.38	227.97		
Interior communications.....	1,840.28		5,161.04		
Wireless telegraphy.....	218.45				
Miscellaneous.....			120.30	594.26	
Total.....	4,583.76	64.88	26,387.24	20,899.66	\$51,937.54
Newport:					
Hull and fittings.....			474.42		
Wireless telegraphy.....	796.93		305.85		
Miscellaneous.....				57.67	
Total.....	796.93		780.27	57.67	1,634.87
New York:					
Hull and fittings.....	62.76		7,910.99		
Permanent ordnance fittings.....	1,307.37	8,101.86			
Engines.....				588.08	
Boilers.....				2,606.77	
Auxiliary machinery.....			3,982.47	1,122.33	
Electric plant.....	2,578.54		1,527.93		
Interior communications.....	2,400.57		2,549.77		
Miscellaneous.....	255.85		938.47	753.07	
Total.....	6,665.09	8,101.86	16,909.63	5,070.25	36,746.83
Nezinsoot:					
Hull and fittings.....			424.50		
Engines.....				35.35	
Boilers.....				71.52	
Miscellaneous.....				61.20	
Total.....			424.50	168.07	592.57
Nina:					
Hull and fittings.....			709.93		
Auxiliary machinery.....			94.40	107.43	
Total.....			804.33	107.43	911.76
Nipsic:					
Hull and fittings.....			324.59		
Miscellaneous.....				113.14	
Total.....			324.59	113.14	437.73
North Carolina:					
Hull and fittings.....			22,108.92		
Permanent ordnance fittings.....		1,192.40			
Engines.....				10,700.76	
Boilers.....				480.26	
Auxiliary machinery.....			611.41	5,038.51	
Electric plant.....	3,594.66				
Interior communications.....	6,044.99		210.18		
Miscellaneous.....	2,764.26		167.08	973.53	
Total.....	12,403.91	1,192.40	23,097.59	17,202.06	53,895.96
North Dakota:					
Hull and fittings.....			4,358.28		
Miscellaneous.....	223.24		973.41	477.33	
Total.....	223.24		5,331.69	477.33	6,032.26
Octopus:					
Hull and fittings.....			3,510.08		
Permanent ordnance fittings.....		10.22			
Engines.....				2,970.97	
Auxiliary machinery.....			19.99	333.54	
Electric plant.....	1,083.92				
Miscellaneous.....	4.81				
Total.....	1,088.73	10.22	3,530.07	3,304.51	7,933.53

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Ohio:					
Hull and fittings.....			\$13,586.73		
Permanent ordnance fittings.....		\$6,353.02	75.06		
Engines.....				\$1,571.99	
Boilers.....				9,797.58	
Auxiliary machinery.....			66.04	1,290.74	
Standing rigging.....			54.60		
Electric plant.....	\$2,322.25		266.83		
Interior communications.....	* 2,073.51		239.05		
Miscellaneous.....	409.57		518.21	75.09	
Total.....	658.31	6,353.02	14,806.52	12,735.40	\$34,553.25
Olympia:					
Public bills.....		12.00			12.00
Oneda:					
Hull and fittings.....			992.04		
Permanent ordnance fittings.....		22.17			
Engines.....				47.07	
Boilers.....				705.93	
Auxiliary machinery.....				64.51	
Electric plant.....	276.46				
Interior communications.....	65.35				
Miscellaneous.....	8.90			42.77	
Total.....	350.71	22.17	992.04	860.28	2,225.20
Oregon:					
Hull and fittings.....		580.39	167,423.69	278.06	
Permanent ordnance fittings.....		17,507.40	34,089.91		
Engines.....				3,502.98	
Boilers.....				6,950.12	
Auxiliary machinery.....			280.36	8,325.23	
Standing rigging.....	281.65				
Electric plant.....	12,957.11		159.81	3,411.27	
Interior communications.....	3,119.07		20,984.94	3,754.55	
Wireless telegraphy.....	164.41				
Miscellaneous.....	863.74			19,721.65	
Total.....	17,385.98	18,087.79	222,038.71	45,943.86	304,356.34
Osceola:					
Hull and fittings.....			771.83	7,643.70	
Engines.....				347.39	
Boilers.....				1,616.98	
Auxiliary machinery.....			28.94	691.93	
Miscellaneous.....				14.89	
Total.....			800.77	10,314.89	11,115.66
Ozark:					
Hull and fittings.....			295.62		
Permanent ordnance fittings.....		329.33			
Auxiliary machinery.....				1,126.40	
Electric plant.....	21.01				
Interior communications.....	13.65				
Total.....	34.66	329.33	295.62	1,126.40	1,786.01
Paducah:					
Hull and fittings.....	16.64		5,722.51		
Engines.....				200.07	
Boilers.....				830.09	
Auxiliary machinery.....				2,591.52	
Electric plant.....	387.64		67.84		
Interior communications.....	848.22				
Miscellaneous.....	12.31			322.27	
Total.....	1,264.81		5,790.35	3,943.95	10,999.11

* Credit.

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Panther:					
Hull and fittings.....			\$6,066.78		
Engines.....				\$7.06	
Auxiliary machinery.....			87.05	1,176.16	
Electric plant.....			39.50		
Miscellaneous.....	\$464.61		423.58	1,073.65	
Total.....	464.61		6,616.91	2,256.87	\$9,338.39
Paragua:					
Hull and fittings.....			835.79		
Engines.....				872.27	
Bollers.....				327.08	
Auxiliary machinery.....			11.78	187.88	
Interior communications.....	8.26	\$3.06	13.50		
Miscellaneous.....				208.76	
Total.....	8.26	3.06	861.07	1,655.99	2,528.38
Patapso:					
Hull and fittings.....	345.36		6,169.02		
Engines.....				760.74	
Bollers.....				277.78	
Auxiliary machinery.....			104.63	810.65	
Electric plant.....	66.87				
Miscellaneous.....			27.87	264.56	
Total.....	412.23		6,301.52	2,113.73	8,827.48
Patuxent:					
Hull and fittings.....			2,990.87		
Engines.....				687.64	
Bollers.....				313.95	
Auxiliary machinery.....			318.00	868.68	
Electric plant.....	208.42			626.39	
Total.....	208.42		3,308.87	2,496.66	6,013.95
Paul Jones:					
Hull and fittings.....			9,890.02		
Permanent ordnance fittings.....		24.74	133.30		
Engines.....				8,921.46	
Bollers.....				1,699.05	
Auxiliary machinery.....			179.50	1,590.41	
Electric plant.....	591.55				
Interior communications.....	939.70		209.05		
Wireless telegraphy.....	8.78				
Miscellaneous.....			140.67	106.96	
Total.....	1,540.03	24.74	10,561.54	12,317.88	24,444.19
Pawnee:					
Hull and fittings.....			1,522.72		
Engines.....				14.38	
Bollers.....				103.71	
Auxiliary machinery.....			23.95	150.11	
Interior communications.....			8.54		
Miscellaneous.....				64.85	
Total.....			1,555.21	333.05	1,888.26
Pawtucket:					
Hull and fittings.....			470.46		
Engines.....				461.02	
Bollers.....				175.81	
Auxiliary machinery.....				2.07	
Total.....			470.46	638.90	1,109.36
Pennacook:					
Hull and fittings.....			837.10		
Engines.....				411.90	
Bollers.....				450.31	
Auxiliary machinery.....			61.99	236.91	
Miscellaneous.....			270.98		
Total.....			1,170.07	1,099.12	2,269.19

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Pennsylvania:					
Hull and fittings.....	\$73.55		\$56,387.18	\$815.97	
Permanent ordnance fittings.....	14.82	\$5,241.13	7,410.70		
Engines.....				7,584.55	
Boilers.....				30,106.04	
Auxiliary machinery.....			2,103.07	22,043.92	
Standing rigging.....	41.52				
Electric plant.....	3,917.29		2,856.70	542.05	
Interior communications.....	4,166.70		5,462.42	1,693.25	
Miscellaneous.....	51.28			9,204.89	
Total.....	8,199.37	5,241.13	74,310.07	77,990.67	\$165,741.24
Pentucket:					
Hull and fittings.....			1,738.00		
Engines.....				375.53	
Boilers.....				308.79	
Auxiliary machinery.....			129.15	182.69	
Electric plant.....	474.19				
Interior communications.....	20.79		102.15		
Miscellaneous.....	199.53		188.70	72.14	
Total.....	694.51		2,158.00	939.15	3,791.66
Peoria:					
Public bills.....			331.65	328.00	659.65
Perry:					
Hull and fittings.....			2,589.45		
Engines.....				776.17	
Boilers.....				1,309.79	
Auxiliary machinery.....				268.51	
Electric plant.....	50.48		7.26		
Interior communications.....	1,062.38		204.95		
Miscellaneous.....	3.24		117.59	275.66	
Total.....	1,116.10		2,919.25	2,630.13	6,665.48
Petrel:					
Hull and fittings.....			3,570.17	16.56	
Engines.....				171.10	
Boilers.....				.83	
Auxiliary machinery.....				6.97	
Electric plant.....	191.62				
Miscellaneous.....			280.64	1,478.27	
Total.....	191.62		3,850.81	1,673.73	5,716.16
Philadelphia:					
Hull and fittings.....	26.13		5,291.43	672.40	
Engines.....				32.69	
Boilers.....				88.63	
Auxiliary machinery.....			923.32	359.46	
Miscellaneous.....				98.76	
Total.....	26.13		6,214.75	1,251.94	7,492.82
Pike:					
Hull and fittings.....	55.97		3,578.42		
Engines.....				1,206.98	
Auxiliary machinery.....			1,068.14	3.11	
Electric plant.....	1,693.60		47.94		
Miscellaneous.....	5.28		511.10	36.55	
Total.....	1,754.25		5,205.60	1,246.64	8,206.49
Piscataqua:					
Hull and fittings.....			1,290.95		
Engines.....				2,150.76	
Boilers.....				513.25	
Auxiliary machinery.....			169.02	1,016.64	
Electric plant.....	201.69				
Wireless telegraphy.....	717.54				
Miscellaneous.....			67.20	988.47	
Total.....	919.23		1,527.17	4,669.12	7,115.52

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total
Plunger:					
Hull and fittings.....			\$2,414.35	\$205.97	
Engines.....				2,002.86	
Auxiliary machinery.....				61.03	
Electric plant.....	\$2,060.73				
Miscellaneous.....	4.17				
Total.....	2,064.90		2,414.35	2,269.86	\$6,779.11
Pompey:					
Hull and fittings.....	00.19		3,017.94		
Engines.....				1,203.34	
Boilers.....				1,209.65	
Auxiliary machinery.....			502.63	87.39	
Electric plant.....	343.13				
Interior communications.....	4.38				
Miscellaneous.....			11.35	706.88	
Total.....	407.70		3,531.92	3,207.26	7,146.88
Pontiac:					
Hull and fittings.....			1,300.79		
Engines.....				228.99	
Boilers.....				200.56	
Auxiliary machinery.....				267.01	
Electric plant.....	5.76				
Miscellaneous.....				22.77	
Total.....	5.76		1,300.79	790.33	2,105.88
Porpoise:					
Hull and fittings.....			1,619.56		
Permanent ordnance fittings.....		\$14.60			
Engines.....				42.39	
Auxiliary machinery.....		3.38	47.33	168.81	
Electric plant.....	215.40				
Miscellaneous.....	49.03		894.91	639.49	
Total.....	264.43	17.98	2,561.80	850.69	3,694.90
Porter:					
Hull and fittings.....			1,537.12		
Permanent ordnance fittings.....		34.98			
Engines.....			64.26	343.95	
Boilers.....			127.10	7,567.80	
Auxiliary machinery.....		3.00		137.61	
Electric plant.....	55.21				
Miscellaneous.....				72.47	
Total.....	55.21	37.98	1,728.48	8,121.92	9,943.59
Potomac:					
Hull and fittings.....	35.11		4,273.54		
Engines.....				914.03	
Boilers.....				2,029.87	
Auxiliary machinery.....			674.44	7,326.93	
Standing rigging.....	33.17				
Electric plant.....	1,211.75				
Miscellaneous.....	94.58		60.00	153.72	
Total.....	1,394.61		5,008.58	11,024.55	17,427.74
Powhatan:					
Hull and fittings.....			1,410.41		
Engines.....				740.49	
Boilers.....				303.52	
Auxiliary machinery.....				201.67	
Electric plant.....	138.15				
Miscellaneous.....				579.09	
Total.....	138.15		1,410.41	1,824.77	3,373.33

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Prairie:					
Hull and fittings.....			\$12,018.35		
Permanent ordnance fittings.....		\$4.84			
Engines.....				\$3,183.18	
Boilers.....				2,202.28	
Auxiliary machinery.....			985.12	5,830.81	
Standing rigging.....	\$23.11				
Electric plant.....	2,308.43		1,174.48		
Interior communications.....	97.21		2,265.95		
Miscellaneous.....	146.99		206.67	1,930.14	
Total.....	2,635.74	4.84	16,650.57	13,155.41	\$32,446.56
Public bills.....				34.78	34.78
Preble:					
Hull and fittings.....			4,124.28		
Engines.....				1,600.46	
Boilers.....			5.00	466.59	
Auxiliary machinery.....				1,107.20	
Electric plant.....	34.47		29.90		
Interior communications.....	1,028.22		182.61		
Miscellaneous.....	52.88		28.24	1,233.22	
Total.....	1,115.57		4,370.03	4,407.47	9,893.07
Public bills.....		308.20			308.20
Preston:					
Hull and fittings.....			677.52		
Engines.....				35.21	
Boilers.....				318.68	
Auxiliary machinery.....			14.86	99.18	
Wireless telegraphy.....	124.23				
Miscellaneous.....	13.46				
Total.....	137.69		692.38	453.07	1,283.14
Princeton:					
Hull and fittings.....			1,461.63	63.98	
Permanent ordnance fittings.....		166.29			
Engines.....				28.95	
Boilers.....				270.57	
Electric plant.....	41.65				
Wireless telegraphy.....	694.64		687.37		
Miscellaneous.....	419.12	30.71	2,981.07	936.92	
Total.....	1,155.41	197.00	5,130.07	1,300.42	7,782.90
Prometheus:					
Hull and fittings.....			76.34		
Auxiliary machinery.....			331.74	21.06	
Miscellaneous.....				36.99	
Total.....			408.08	58.05	466.13
Quiros:					
Hull and fittings.....			11,421.97		
Engines.....				2,142.43	
Boilers.....				2,306.67	
Auxiliary machinery.....			571.66	3,638.84	
Miscellaneous.....	46.25			1,335.13	
Total.....	46.25		11,993.63	9,423.07	21,462.95
Rainbow:					
Hull and fittings.....	372.64		26,366.80		
Engines.....				4,281.29	
Boilers.....				10,849.76	
Auxiliary machinery.....			130.24	22,331.91	
Electric plant.....	738.90		116.53		
Interior communications.....	1,147.23				
Miscellaneous.....			30.53	4,636.97	
Total.....	2,258.77		26,644.15	42,099.93	71,002.85

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Raleigh:					
Hull and fittings.....			\$42,108.40		
Permanent ordnance fittings.....		\$34.79			
Engines.....				\$27,750.01	
Boilers.....				41,500.24	
Auxiliary machinery.....			2,235.53	10,079.35	
Standing rigging.....	\$1,002.30				
Electric plant.....	8,131.39	4.74	297.82		
Interior communications.....	2,100.41		3,467.05		
Miscellaneous.....			267.45	15,770.86	
Total.....	11,234.10	39.53	48,376.25	95,118.46	\$154,768.34
Reld:					
Hull and fittings.....			896.23		
Engines.....				28.12	
Boilers.....				419.31	
Auxiliary machinery.....				378.82	
Standing rigging.....	6.92				
Wireless telegraphy.....	140.30				
Miscellaneous.....	165.28			430.19	
Total.....	31.90		896.23	1,256.44	2,184.57
Relief:					
Hull and fittings.....			2,121.32		
Engines.....				510.67	
Boilers.....				98.21	
Auxiliary machinery.....				1,816.06	
Electric plant.....	530.80				
Miscellaneous.....	178.86		233.18	85.55	
Total.....	699.66		2,354.50	2,519.79	5,573.95
Restless:					
Hull and fittings.....			716.22		
Engines.....				4.34	
Miscellaneous.....	71.18				
Total.....	71.18		716.22	4.34	791.74
Rhode Island:					
Hull and fittings.....			71,994.40		
Permanent ordnance fittings.....		11,102.63	5,175.85		
Engines.....				1,800.65	
Boilers.....				3,442.30	
Auxiliary machinery.....			3,951.62	27,385.19	
Standing rigging.....	143.31				
Electric plant.....	6,748.31		1,142.02		
Interior communications.....	10,955.20		8,713.58		
Wireless telegraphy.....	2,350.77				
Miscellaneous.....	4,278.93		394.19	6,303.76	
Total.....	24,476.52	11,102.63	91,371.72	39,021.90	165,972.77
Public bills.....			330.00	274.00	604.00
Richmond:					
Hull and fittings.....			2,036.18		
Auxiliary machinery.....				868.34	
Miscellaneous.....			227.26	502.07	
Total.....			2,263.44	1,431.31	3,694.75
Rocket:					
Hull and fittings.....			2,078.31		
Engines.....				311.80	
Boilers.....				571.61	
Auxiliary machinery.....			93.58	174.67	
Miscellaneous.....			61.98		
Total.....			2,233.87	1,058.14	3,292.01

• Credit.

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Rodgers:					
Hull and fittings.....	\$184.72		\$11,981.41		
Permanent ordnance fittings.....		\$83.72			
Engines.....				\$2,197.12	
Boilers.....	442.25		1,247.95	8,101.69	
Auxiliary machinery.....		70.36		1,193.54	
Electric plant.....	372.65				
Miscellaneous.....	124.60		379.18	594.74	
Total.....	1,124.22	154.08	13,608.54	12,087.09	\$26,973.93
Rowan:					
Hull and fittings.....			3,991.99		
Permanent ordnance fittings.....		3.47			
Engines.....			2.29	7,142.14	
Boilers.....				7,505.72	
Auxiliary machinery.....			300.45	1,361.29	
Electric plant.....	56.22		14.93		
Miscellaneous.....			248.05	2,584.92	
Total.....	56.22	3.47	4,557.71	18,594.07	23,211.47
Salem:					
Hull and fittings.....	17.02		16,771.29	339.21	
Permanent ordnance fittings.....		158.50			
Engines.....				2,130.66	
Boilers.....				3,419.29	
Auxiliary machinery.....		53.15	420.99	3,522.00	
Standing rigging.....	2,585.52				
Electric plant.....	2,592.41				
Interior communications.....	39.42		1,412.39		
Wireless telegraphy.....	2,658.17			132.59	
Miscellaneous.....			677.16	5,220.24	
Total.....	7,892.54	211.65	19,414.42	14,631.40	42,150.01
Public bills.....	15,000.00		437.34	9,390.63	24,827.97
Samar:					
Hull and fittings.....			11.80		11.80
Public bills.....			90.86	938.49	1,029.35
Samoset:					
Hull and fittings.....			1,901.48		
Engines.....				218.82	
Boilers.....				119.96	
Auxiliary machinery.....				1,091.85	
Electric plant.....	674.38		113.02		
Miscellaneous.....	117.05			96.72	
Total.....	791.43		2,014.50	1,527.35	4,333.28
Sandoval:					
Public bills.....			203.98	346.01	549.99
San Francisco:					
Hull and fittings.....			40,475.95		
Engines.....				25,225.21	
Boilers.....				48,041.50	
Auxiliary machinery.....			1,304.07	9,964.45	
Electric plant.....	254.95				
Interior communications.....	25.86				
Miscellaneous.....	26.86			3,962.79	
Total.....	304.77		41,780.02	87,193.95	129,278.74
Saturn:					
Hull and fittings.....			4,664.08	42.04	
Engines.....				2,256.99	
Boilers.....				1,270.19	
Auxiliary machinery.....			856.62	680.71	
Miscellaneous.....	4.17			391.24	
Total.....	4.17		5,520.70	4,641.17	10,166.04
Scorpon:					
Public bills.....			145.76	14,807.25	14,953.01

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Sebago:					
Hull and fittings.....			\$477.45		
Engines.....				\$307.17	
Boilers.....				213.61	
Auxiliary machinery.....				71.64	
Total.....			477.45	592.42	\$1,069.87
Severn:					
Hull and fittings.....			2,454.78		
Permanent ordnance fittings.....		\$229.79			
Boilers.....				451.17	
Auxiliary machinery.....			94.83	315.82	
Standing rigging.....	\$83.93				
Miscellaneous.....	88.93		103.15	275.83	
Total.....	172.86	229.79	2,652.76	1,042.82	4,098.23
Public bills.....			27.35		27.35
Shark:					
Hull and fittings.....	242.99		1,024.98		
Permanent ordnance fittings.....		34.77			
Engines.....				460.84	
Auxiliary machinery.....				280.39	
Electric plant.....	88.16				
Miscellaneous.....	49.04	23.68	854.98	901.32	
Total.....	380.19	58.45	2,479.96	1,642.55	4,561.15
Shubrick:					
Hull and fittings.....			1,233.90	227.48	
Permanent ordnance fittings.....		279.24			
Engines.....				1,573.39	
Boilers.....				.86	
Auxiliary machinery.....				76.00	
Total.....		279.24	1,233.90	1,877.73	3,390.87
Sloux:					
Hull and fittings.....			1,390.83	40.43	
Engines.....				528.60	
Boilers.....				471.57	
Auxiliary machinery.....			23.62	31.42	
Miscellaneous.....	19.39		28.35	81.31	
Total.....	19.39		1,442.80	1,153.33	2,615.52
Siren:					
Electric plant.....	9.34				9.34
Smith:					
Hull and fittings.....			682.73		
Engines.....				124.84	
Auxiliary machinery.....				226.25	
Total.....			682.73	351.09	1,033.82
Snapper:					
Hull and fittings.....			682.59		
Engines.....				206.51	
Auxiliary machinery.....				13.18	
Miscellaneous.....	619.42		356.17	87.86	
Total.....	619.42		1,018.76	307.55	1,945.73
Solace:					
Hull and fittings.....			95,986.64		
Engines.....			178.74	431.03	
Boilers.....			712.46	8,705.37	
Auxiliary machinery.....	60.29		2,055.82	4,116.72	
Standing rigging.....	62.89				
Electric plant.....	3,192.19		103.42		
Interior communications.....			135.50		
Miscellaneous.....	415.83			9,249.48	
Total.....	3,731.09		99,172.58	22,502.60	125,406.18
Public bills.....	211.25		1,297.44		1,508.69

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Somers:					
Hull and fittings.....			\$0.46		\$0.46
Sotoyomo:					
Hull and fittings.....			2,069.26		
Engines.....				\$788.25	
Boilers.....				379.15	
Auxiliary machinery.....				274.29	
Total.....			2,069.26	1,441.69	3,510.95
South Carolina:					
Hull and fittings.....		\$42.73	196.85		
Permanent ordnance fittings.....		256.74			
Auxiliary machinery.....			146.03	1,416.72	
Interior communications.....	\$12.41				
Miscellaneous.....	332.05	240.95	1,497.37	1,016.42	
Total.....	344.46	540.42	1,840.25	2,433.14	5,158.27
South Dakota:					
Hull and fittings.....			40,407.44		
Permanent ordnance fittings.....		397.54			
Engines.....				3,897.41	
Boilers.....				837.45	
Auxiliary machinery.....			2,792.00	1,038.92	
Electric plant.....	6,191.07		369.45		
Interior communications.....	8,129.67		11,580.38		
Miscellaneous.....	376.67			4,804.85	
Total.....	14,697.41	397.54	55,159.27	11,168.63	81,422.85
Public bills.....			3,222.51	178.19	3,400.70
Southery:					
Hull and fittings.....			1,021.60		
Boilers.....				10.93	
Miscellaneous.....				234.83	
Total.....			1,021.60	245.76	1,267.36
Standish:					
Hull and fittings.....			2,697.91		
Engines.....				100.02	
Boilers.....				1,551.22	
Auxiliary machinery.....			82.01	1,030.96	
Electric plant.....	99.30				
Miscellaneous.....				71.96	
Total.....	99.30		2,779.92	2,754.16	5,633.38
Sterling:					
Hull and fittings.....	112.12		1,101.35		
Engines.....				62.07	
Boilers.....				204.06	
Auxiliary machinery.....				215.58	
Interior communications.....	5.42				
Miscellaneous.....				28.58	
Total.....	117.54		1,101.35	510.29	1,729.18
Stewart:					
Hull and fittings.....			16,808.07		
Permanent ordnance fittings.....		20.27			
Engines.....				13,068.05	
Boilers.....				28,802.24	
Auxiliary machinery.....			6.40	6,388.17	
Standing rigging.....					
Electric plant.....	96.17				
Interior communications.....	935.48		414.04		
Wireless telegraph.....	848.36		269.43		
Miscellaneous.....	73.68	63.59	125.01	2,142.82	
Total.....	1,953.69	83.86	17,623.85	50,401.28	70,062.68

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Stingray:					
Hull and fittings.....			\$634.65		
Engines.....				\$301.80	
Electric plant.....	\$9.53				
Miscellaneous.....	747.57		339.81		
Total.....	757.10		974.46	301.89	\$2,033.45
St. Louis:					
Hull and fittings.....			11,428.70	10.87	
Permanent ordnance fittings.....		\$1,434.92	252.18		
Engines.....				400.85	
Boilers.....				819.25	
Auxiliary machinery.....			106.47	15,074.03	
Electric plant.....	1,765.62				
Interior communications.....	2,221.51		4,505.55		
Miscellaneous.....				30.46	
Total.....	3,987.13	1,434.92	16,292.90	16,336.06	38,051.01
Stockton:					
Hull and fittings.....			1,005.37		
Permanent ordnance fittings.....		118.54			
Engines.....				419.96	
Auxiliary machinery.....		2.19		108.40	
Wireless telegraphy.....	7.15		9.16		
Miscellaneous.....	1.18				
Total.....	8.33	120.73	1,014.53	528.36	1,671.95
Stranger:					
Hull and fittings.....			5,310.15		
Engines.....				127.75	
Boilers.....			142.04	8,476.11	
Auxiliary machinery.....				147.23	
Standing rigging.....		50.35			
Electric plant.....	1,203.56		7.68		
Interior communications.....				97.20	
Total.....		1,253.91	5,459.87	8,848.29	15,562.07
Stringham:					
Hull and fittings.....	59.76		4,358.74	88.71	
Permanent ordnance fittings.....			12.84		
Engines.....				4,418.07	
Boilers.....				3,701.33	
Auxiliary machinery.....		379.37	21.50	126.45	
Electric plant.....	302.02		39.72		
Interior communications.....	735.55		169.21		
Wireless telegraphy.....	247.96		212.84		
Miscellaneous.....	17.39		100.62	469.31	
Total.....	1,362.68	379.37	4,915.47	8,803.87	15,461.39
Supply:					
Hull and fittings.....	118.98		2,878.57		
Engines.....				4.84	
Boilers.....				2,359.18	
Auxiliary machinery.....			608.04	46.93	
Electric plant.....	236.64				
Wireless telegraphy.....	7.01				
Miscellaneous.....			29.51	126.37	
Total.....	362.63		3,516.12	2,528.32	6,407.07
Public bills.....				933.75	933.75
Sylph:					
Hull and fittings.....			1,160.73		
Engines.....				570.58	
Boilers.....				128.92	
Auxiliary machinery.....			66.10	128.94	
Electric plant.....	5.11				
Miscellaneous.....	9.19		1,655.54	126.71	
Total.....	14.30		2,882.37	935.15	3,831.82

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Sylvia:					
Hull and fittings.....			\$1,438.18		
Standing rigging.....	\$77.90	\$38.16			
Electric plant.....		394.14			
Miscellaneous.....		2.32	2.30		
Total.....	77.90	434.62	1,440.48		\$1,953.00
Tacoma:					
Hull and fittings.....			12,599.78		
Engines.....				\$411.22	
Boilers.....				4,552.75	
Auxiliary machinery.....			308.08	271.37	
Electric plant.....	1,916.61		814.59		
Interior communications.....	2,676.83		3,166.38		
Wireless telegraphy.....	504.69		177.27		
Miscellaneous.....	50.65			1,595.62	
Total.....	5,148.78		17,066.10	6,830.96	29,045.84
Tallahassee:					
Hull and fittings.....			11,757.78		
Permanent ordnance fittings.....		2,577.18			
Engines.....				147.88	
Auxiliary machinery.....			15.22	1,281.53	
Electric plant.....	1,026.70				
Interior communications.....	13.65				
Miscellaneous.....				422.59	
Total.....	1,040.35	2,577.18	11,773.00	1,851.70	17,242.23
Tarantula:					
Hull and fittings.....			3,318.09		
Engines.....				1,577.37	
Auxiliary machinery.....			386.13		
Electric plant.....	3,013.23				
Miscellaneous.....	1,059.73				
Total.....	4,072.96		3,704.22	1,577.37	9,354.55
Tarpon:					
Hull and fittings.....			648.42		
Engines.....				253.69	
Auxiliary machinery.....			13.20		
Miscellaneous.....	612.25		322.84	60.69	
Total.....	612.25		984.46	314.38	1,911.09
Public bills.....				43.00	43.00
Tecumseh:					
Hull and fittings.....			168.59		
Engines.....				985.49	
Boilers.....				254.66	
Auxiliary machinery.....			240.00	51.20	
Miscellaneous.....			3,663.56		
Total.....			4,072.15	1,291.35	5,363.50
Tennessee:					
Hull and fittings.....	41.72		44,426.26		
Permanent ordnance fittings.....	2,911.31	7,501.84	17,952.15		
Engines.....				8,572.25	
Boilers.....				17,064.92	
Auxiliary machinery.....			12,981.25	25,840.95	
Electric plant.....	4,616.17			337.42	
Interior communications.....	15,785.76		2,243.44	1,339.34	
Wireless telegraphy.....	421.71				
Miscellaneous.....	506.20			2,191.41	
Total.....	24,280.87	7,501.84	77,603.10	55,346.29	164,732.10
Terror:					
Hull and fittings.....			41.26		41.26

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Texas:					
Hull and fittings.....			\$9,556.27	\$59.95	
Permanent ordnance fittings.....		\$4.48			
Engines.....				10.05	
Boilers.....				92.51	
Auxiliary machinery.....			387.40	2,065.01	
Miscellaneous.....	\$292.19				
Total.....	292.19	4.48	9,943.67	2,227.52	\$12,467.86
Thornton:					
Hull and fittings.....			1,261.37	248.49	
Permanent ordnance fittings.....		25.00			
Engines.....				709.88	
Boilers.....				1,145.75	
Auxiliary machinery.....			251.36	379.53	
Electric plant.....	66.16				
Miscellaneous.....				65.32	
Total.....	66.16	25.00	1,512.73	2,548.67	4,152.56
Tingey:					
Hull and fittings.....			1,286.71		
Permanent ordnance fittings.....		1.40			
Engines.....				1,432.19	
Boilers.....				949.19	
Auxiliary machinery.....			101.57	162.84	
Electric plant.....	461.45				
Total.....	461.45	1.40	1,388.28	2,514.22	4,365.35
Tonopah:					
Hull and fittings.....			606.32		
Permanent ordnance fittings.....		86.92			
Engines.....				958.02	
Boilers.....				8,000.58	
Auxiliary machinery.....			18.23	1,709.30	
Electric plant.....	1,162.37				
Interior communications.....	10.92				
Wireless telegraphy.....	21.43				
Miscellaneous.....				91.97	
Total.....	1,194.72	86.92	624.55	10,759.87	12,666.06
Topeka:					
Hull and fittings.....	30.98		957.09		988.07
Traffic:					
Hull and fittings.....			1,781.40		
Engines.....				272.41	
Boilers.....				93.95	
Auxiliary machinery.....			81.53	4,064.69	
Miscellaneous.....				479.39	
Total.....			1,863.02	4,910.35	6,773.37
Triton:					
Hull and fittings.....			1,109.53		
Engines.....				949.49	
Boilers.....				787.73	
Auxiliary machinery.....			390.81	245.43	
Electric plant.....	2,425.67				
Miscellaneous.....			369.79	113.10	
Total.....	2,425.67		1,870.13	2,095.75	6,391.55
Truxtun:					
Hull and fittings.....			2,500.23		
Engines.....				1,354.83	
Boilers.....				405.01	
Auxiliary machinery.....				3,745.00	
Standing rigging.....	549.94				
Electric plant.....	18.02				
Interior communications.....	1,070.93		242.97		
Miscellaneous.....			14.45	324.75	
Total.....	1,638.89		2,757.65	5,829.59	10,226.13

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Unadilla:					
Hull and fittings.....			\$1,402.09		
Engines.....				\$734.40	
Boilers.....				1,256.48	
Auxiliary machinery.....			79.00	533.93	
Standing rigging.....	\$11.88				
Electric plant.....	270.77				
Miscellaneous.....			147.62	628.35	
Total.....	282.65		1,629.61	3,123.17	\$5,035.43
Uncaas:					
Hull and fittings.....			101.02		
Engines.....				1,146.36	
Electric plant.....	208.04				
Miscellaneous.....				32.28	
Total.....	208.04		101.02	1,178.64	1,487.70
Vermont:					
Hull and fittings.....	1,786.02	\$35.86	45,386.27		
Permanent ordnance fittings.....	648.58	13,896.97	12,789.46		
Engines.....				27,057.40	
Boilers.....				80.59	
Auxiliary machinery.....			45,965.78	32,006.70	
Electric plant.....	2,232.70		244.73		
Interior communications.....	4,859.21		4,321.00		
Miscellaneous.....	1,513.87	483.50	3,706.53	4,459.28	
Total.....	11,049.38	14,416.33	112,494.77	63,694.37	201,463.85
Public bills.....					
				150.00	150.00
Vestal:					
Hull and fittings.....			5,501.46		
Permanent ordnance fittings.....			51.03		
Engines.....				975.32	
Boilers.....				2,933.01	
Auxiliary machinery.....			354.99	103.01	
Electric plant.....	221.37				
Interior communications.....	1.42				
Miscellaneous.....			21.37	5,594.64	
Total.....	222.79		5,928.85	9,515.98	15,667.62
Public bills.....					
				100.00	100.00
Vesuvius:					
Hull and fittings.....			9,476.74	242.69	
Permanent ordnance fittings.....		5,113.50	111.51		
Engines.....				753.13	
Boilers.....			5,312.71	33,368.09	
Auxiliary machinery.....	529.87		84.12	4,607.55	
Standing rigging.....			3.04	175.57	
Electric plant.....	132.00		641.35		
Interior communications.....			415.31		
Miscellaneous.....		29.89	577.54	29,459.74	
Total.....	661.87	5,143.39	15,939.62	68,696.17	90,351.05
Vicksburg:					
Hull and fittings.....			7,843.56		
Engines.....				1,000.05	
Auxiliary machinery.....			21.96	69.72	
Electric plant.....	425.63		32.60		
Miscellaneous.....			1.57	2,058.48	
Total.....	425.63		7,899.69	3,128.25	11,453.57
Vigilant:					
Hull and fittings.....			3,186.61		
Engines.....				1,251.04	
Boilers.....				1,015.76	
Standing rigging.....	213.58				
Electric plant.....	57.08				
Miscellaneous.....				76.12	
Total.....	271.66		3,186.61	2,342.92	5,800.59

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STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Villalobos:					
Hull and fittings.....	\$44.43		\$95.44		\$139.87
Public bills.....			54.95	\$247.62	302.57
Viper:					
Hull and fittings.....			3,051.02		
Engines.....	13.33			2,081.02	218.59
Auxiliary machinery.....			840.76		
Electric plant.....	20.12				
Miscellaneous.....	1,060.82				
Total.....	1,094.27		3,891.78	2,249.61	7,235.66
Virginia:					
Hull and fittings.....			53,058.25		
Permanent ordnance fittings.....		\$13,816.34			
Engines.....				34,052.15	
Boilers.....				10,665.84	
Auxiliary machinery.....			5,007.94	34,727.20	
Electric plant.....	11,135.71		274.47		
Interior communications.....	5,077.31		4,613.13		
Miscellaneous.....	423.23		184.07	1,196.85	
Total.....	16,636.25	13,816.34	63,137.86	80,642.04	174,232.49
Vixen:					
Hull and fittings.....	695.95		56.90	3,045.38	
Miscellaneous.....	.78				
Total.....	696.73		56.90	3,045.38	3,799.01
Vulcan:					
Hull and fittings.....			566.41		
Engines.....				98.02	
Boilers.....				73.31	
Auxiliary machinery.....			159.88	171.82	
Standing rigging.....	6.86				
Electric plant.....	11.47				
Miscellaneous.....	52.25			23.12	
Total.....	70.58		726.29	366.27	1,163.14
Waban:					
Boilers.....				3,929.70	3,929.70
Wabash:					
Hull and fittings.....	591.51		2,079.88		
Boilers.....				298.37	
Auxiliary machinery.....				116.07	
Electric plant.....	29.79				
Miscellaneous.....	412.05		33.09	44.47	
Total.....	1,033.35		2,112.97	453.91	3,605.23
Wahnetta:					
Hull and fittings.....			2,219.03		
Engines.....				219.79	
Boilers.....				2,021.20	
Auxiliary machinery.....				213.76	
Total.....			2,219.03	2,454.75	4,674.68
Washington:					
Hull and fittings.....	18.30		50,358.34		
Permanent ordnance fittings.....	994.76	11,259.35	20,654.36		
Engines.....				2,825.56	
Boilers.....				1,690.77	
Auxiliary machinery.....			10,614.33	18,059.15	
Electric plant.....	3,112.71			69.14	
Interior communications.....	15,180.99		8,731.78	1,634.15	
Wireless telegraphy.....	55.34				
Miscellaneous.....	104.40			4,571.06	
Total.....	19,466.50	11,259.35	99,358.81	28,849.83	158,934.49

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Wasp:					
Hull and fittings.....			\$2,394.19		
Engines.....				\$74.21	
Boilers.....				838.78	
Auxiliary machinery.....				42.32	
Standing rigging.....	\$66.34		57.28		
Electric plant.....	184.14				
Miscellaneous.....			6.54	944.47	
Total.....	250.48		2,458.01	1,899.78	\$4,608.27
West Virginia:					
Hull and fittings.....			43,168.08		
Permanent ordnance fittings.....		\$227.67			
Engines.....				61,404.02	
Boilers.....				38,856.15	
Auxiliary machinery.....			4,511.32	14,155.64	
Electric plant.....	12,670.05	280.91	5,724.08		
Interior communications.....	733.17		3,177.48		
Wireless telegraphy.....	40.27				
Miscellaneous.....	510.11		21.78	15,065.57	
Total.....	13,953.60	508.58	56,602.74	129,481.38	200,546.30
Public bills.....			3,234.01	1,859.53	5,093.54
Wheeling:					
Hull and fittings.....	345.28		10,189.23	46.18	
Permanent ordnance fittings.....		80.80			
Engines.....				135.33	
Auxiliary machinery.....			8.44	2,600.96	
Standing rigging.....	35.77				
Interior communications.....	691.84		1,793.28		
Wireless telegraphy.....	364.61				
Miscellaneous.....	158.01	270.17	32.20	765.47	
Total.....	1,595.51	350.97	12,023.15	3,607.94	17,577.57
Whipple:					
Hull and fittings.....			2,194.76		
Engines.....				1,498.99	
Boilers.....				778.99	
Auxiliary machinery.....				529.93	
Standing rigging.....	14.49				
Electric plant.....	99.54				
Interior communications.....	1,100.67		312.83		
Miscellaneous.....			5.17	319.42	
Total.....	1,214.70		2,512.76	3,127.33	6,854.79
Wilkes:					
Hull and fittings.....			1,971.52		
Engines.....				1,373.94	
Boilers.....				307.26	
Auxiliary machinery.....				82.61	
Electric plant.....	51.29				
Miscellaneous.....	3.33			.88	
Total.....	54.62		1,971.52	1,764.69	3,790.83
Wilmington:					
Hull and fittings.....			203.95		
Interior communications.....	956.34				
Total.....	956.34		203.95		1,160.29
Public bills.....			589.26	2,286.38	2,875.64
Winslow:					
Hull and fittings.....			260.34		
Engines.....				88.11	
Boilers.....				4.19	
Auxiliary machinery.....			52.23	3.08	
Miscellaneous.....	38.63		2.70	3.99	
Total.....	38.63		324.27	99.37	462.27

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

Ships.	Equipment of vessels.	Bureau of Ordnance appropriations.	Construction and repair.	Steam machinery.	Total.
Wisconsin:					
Hull and fittings.....	\$320.62		\$6,303.93		
Permanent ordnance fittings.....		\$395.70			
Electric plant.....	310.03				
Interior communications.....	37.69		668.57		
Miscellaneous.....	34.62	186.66		\$94.06	
Total.....	702.96	582.36	6,972.50	94.06	\$8,351.88
Public bills.....				446.74	446.74
Wolverine:					
Public bills.....			3,300.75		3,300.75
Wompatuck:					
Hull and fittings.....	82.62		9,574.71	2.41	
Engines.....				586.46	
Boilers.....				193.96	
Auxiliary machinery.....			442.11	1,959.44	
Electric plant.....	714.85				
Miscellaneous.....				1,013.55	
Total.....	797.47		10,016.82	3,755.82	14,570.11
Worden:					
Hull and fittings.....			2,274.52		
Engines.....				586.94	
Boilers.....				893.63	
Auxiliary machinery.....				69.76	
Interior communications.....	1,214.73		96.97		
Miscellaneous.....				37.37	
Total.....	1,214.73		2,371.49	1,587.70	5,173.92
Yankee:					
Auxiliary machinery.....				108.35	108.35
Yankton:					
Hull and fittings.....			7,593.53		
Engines.....				527.39	
Boilers.....				369.68	
Auxiliary machinery.....			177.02	3,402.79	
Electric plant.....	1,631.51				
Interior communications.....	.60				
Wireless telegraphy.....	430.89				
Miscellaneous.....	46.67			1,147.27	
Total.....	2,109.67		7,770.55	5,447.13	15,327.35
Yantic:					
Public bills.....	431.93		1,414.89	656.89	2,503.71
Yorktown:					
Hull and fittings.....			3,706.43		
Engines.....				768.01	
Boilers.....				2,280.86	
Auxiliary machinery.....			547.04	1,549.21	
Standing rigging.....	94.53				
Electric plant.....	84.45		132.63		
Interior communications.....	55.31		1,068.26		
Miscellaneous.....			72.03	378.44	
Total.....	234.29		6,126.39	4,976.52	11,337.20
Public bills.....			50.00		50.00

RECAPITULATION.

Total labor and material.....	\$762,539.90	\$396,842.11	\$4,048,500.33	\$2,995,959.18	\$8,203,841.52
Total public bills.....	30,987.69	380.20	44,520.80	54,658.92	130,547.61
Total Title D.....	793,527.59	397,222.31	4,093,021.13	3,050,618.10	8,334,389.13

STATEMENT B—Continued.

TABLE 4.—Statement showing cost of repairs to vessels at shore stations (Title D) and the appropriations and character of work to which the expenditures are charged—Continued.

APPROPRIATIONS. (TITLE D.)

	Casualties.	Changes and additions.	Wear and maintenance.	Total
Equipment of vessels:				
Labor and material.....	\$668.21	\$529,666.83	\$232,204.86	\$762,539.90
Public bills.....				30,987.69
Total.....				793,527.59
Ordnance and ordnance stores:				
Labor and material.....	794.39	288,329.88	90,251.10	379,375.37
Public bills.....				880.20
Total.....				379,755.57
Construction and repair:				
Labor and material.....	73,352.28	2,004,553.67	1,910,594.38	4,048,500.33
Public bills.....				44,520.80
Total.....				4,093,021.13
Steam machinery:				
Labor and material.....	9,804.56	801,149.99	2,185,004.63	2,995,959.18
Public bills.....				54,686.92
Total.....				3,050,646.10
Arming and equipping Naval Militia.....		576.32	1,256.23	1,832.55
Modernizing turrets of ships of the navy.....		10,603.90		10,603.90
Fire control for ships of the navy.....		840.55		840.55
Modernizing batteries for the Massachusetts and Oregon, and new guns and armor for the New York.....		4,189.74		4,189.74
Total labor and material.....	84,619.44	3,699,910.85	4,419,311.20	8,203,841.49
Total public bills.....				130,547.61
Total Title D.....				8,334,389.10

STATEMENT B—Continued.

TABLE 5.—Expenditures at shore stations on account of improvements to real estate and directly to object, amount paid for

[For the appropriations charged

	Navy-yards, etc.	TITLE E.						
		Land.	Buildings.	Quay walls and piers.	Yard appliances.	Yard craft.	Quarters.	Furniture.
1	Portsmouth, N. H.....	\$7,457.49	\$23,815.98	\$31,715.68	\$6,424.23	\$810.83	.....	\$809.95
2	Boston, Mass.....	47,149.11	97,111.30	2,036.71	10,463.24	4,339.01	.....	4,288.71
3	Torpedo station, Newport.	5,662.20	12,532.02	.....	.....	4,200.88	.....	5,046.20
4	Training station, Newport.	71,812.41	17,136.48	.....	.....	.....	.....	1,440.10
5	New York, N. Y.....	7,192.88	95,908.11	3,830.79	26,328.39	18,606.36	\$675.84	6,363.47
6	Philadelphia, Pa.....	45,412.02	156,410.35	50,910.56	27,621.29	50,784.35	.....	2,654.90
7	Naval Home.....	.....	11,888.08	.....	.....	.....	.....	62.50
8	Naval Academy.....	75,000.00	231,241.27	.....	.....	4,798.45	.....	7,787.73
9	Washington, D. C.....	11,665.86	231,050.28	3,783.84	917.35	26,017.44	.....	1,602.53
10	Naval proving ground.....	.....	54,752.95	.....	.....	.....	.....	.....
11	Norfolk, Va.....	16,417.74	142,695.19	9,005.59	64,146.17	125.00	.....	4,718.98
12	Charleston, S. C.....	30,826.86	22,566.15	689.64	13,070.31	4,206.78	.....	6,913.31
13	Key West, Fla.....	25,196.82	108,666.19	.....	.....	842.75	311.19	1,384.24
14	Pensacola, Fla.....	677.70	972.60	.....	4,130.76	7,638.30	.....	2,023.41
15	New Orleans, La.....	35,986.39	16,049.43	32.80	.....	.....	814.31	336.50
16	Mare Island, Cal.....	32,447.67	166,188.91	21,365.11	98,800.19	147,195.27	.....	3,808.16
17	Training station, California.	15,139.99	6,982.58	.....	.....	.....	.....	380.91
18	Puget Sound, Wash.....	7,123.92	93,839.55	4,846.33	116,817.73	13,195.71	.....	1,906.58
19	Bradford, R. I.....	13,906.72	2,677.48	.....	.....	15.47	.....	62.30
20	Training station, Great Lakes.	72,314.73	559,250.17	.....	1,750.00	.....	.....	1,449.75
21	Las Animas, Colo.....	11,202.35	64,773.25	.....	.....	.....	.....	3,499.11
22	Guantanamo, Cuba.....	406.13	558.12	.....	4,758.97	667.72	.....	5.00
23	San Juan, P. R.....	.....	33.50	.....	.....	.....	.....	10.75
24	Sitka, Alaska.....	.....	3,100.00	.....	.....	.....	.....	.....
25	San Diego, Cal.....	.....	.....	.....	.....	4,815.42	.....	129.00
26	Naval station, Hawaii.....	666,902.83	301,572.20	.....	19,503.18	3,184.97	.....	.....
27	Tutulla, Samoa.....	.....	.....	.....	41.00	2,900.00	.....	146.62
28	Guam, L. I.....	.....	7,658.49	269.93	2,679.10	2,741.24	.....	1,798.22
29	Cavite, P. I.....	12,564.79	14,979.60	2,998.67	63,199.10	36,669.58	.....	1,216.15
30	Olongapo, P. I.....	64,770.23	32,929.65	29,460.65	393.92	.....	226.33	6,013.19
31	Tiburon, Cal.....	.....	37,330.31	23,689.84	.....	307.39	.....	197.10
32	Yokohama, Japan.....	.....	4,666.26	.....	.....	.....	.....	776.07
33	Plehillinque, Mexico.....	.....	.....	.....	.....	151.73	.....	.....
34	Naval Magazine, New England coast.	.....	.....	.....	.....	.....	.....	.....
35	Naval magazine, Dover, N. J.	199.92	16,942.12	.....	3,006.62	.....	.....	38.50
36	Naval magazine, Iona Island, N. Y.	.....	18,265.63	.....	331.90	.....	.....	237.16
37	Naval magazine, Fort Millin, Pa.	.....	7,691.34	.....	.....	.....	2,737.79	.....
38	Naval magazine, Norfolk, Va.	177.32	5,397.17	.....	.....	.....	.....	.....
39	Naval magazine, Mare Island, Cal.	306.38	10,443.22	.....	1,954.08	.....	.....	.....
40	Naval magazine, Puget Sound, Wash.	8,953.13	20,267.61	75.67	857.44	.....	.....	907.75
41	Naval magazines, Philippine Islands.	.....	130.51	.....	.....	.....	.....	.....
42	Wireless telegraph stations.	.....	.....	.....	.....	.....	.....	.....
	Total.....	1,422,987.11	2,598,474.05	184,711.27	467,194.97	334,274.65	4,765.46	68,105.06

STATEMENT B—Continued.

chattels (Title E—Industrial) and machinery plant (Title F), including public bills applied labor, and material drawn from store.

with these expenditures see Table 6.]

TITLE E.					TITLE F.				
Dry docks.	Fire apparatus.	Telephone, telegraph, and tube systems.	Vehicles and live stock.	Miscellaneous.	Total Title E.	Power plant.	Machinery plant.	Total Title F.	
\$4,618.63		\$57.52	\$2,028.22	\$14,057.31	\$91,795.84	\$8,865.72	\$43,345.39	\$52,211.11	1
2,158.76	\$697.49	238.36	6,491.96	12,452.37	187,426.93	76,763.07	64,177.35	140,940.42	2
		552.10	10.98	1,957.67	29,962.05	22.50	82,117.16	82,139.66	3
	1,789.70	425.00		638.62	93,242.31	5,429.70		5,429.70	4
678,383.32	80.48	119.82	1,531.79	20,966.66	859,987.91	91,217.55	84,295.14	175,512.69	5
32,920.20		2,053.89	3,873.42	3,115.57	375,756.55	113,392.09	19,080.02	132,428.11	6
			710.00	33,778.70	11,950.58		8,269.72	8,269.72	7
	369.46	118.72	16,558.59	4,891.54	353,316.21	3,670.75	126,586.58	130,257.33	8
7,645.89	95.08	1,763.24	3,345.43	43,911.34	54,752.93	13,889.74	24,451.48	38,341.22	9
11,869.11	4,498.19	2,913.63	1,725.98	2,255.00	293,859.65	182,081.47	69,159.22	251,240.69	10
	75.00	628.66		533.99	191,624.96	47,373.04	64,814.17	109,387.21	11
		4,036.10	674.70	3.68	137,438.75	1,786.53	1,786.53	1,786.53	12
				63.84	29,177.25	1,869.38	6,384.75	8,245.13	13
102,660.89		42.70	6,832.76	2,722.35	53,283.33	12,304.40	7,108.79	19,413.19	14
	18.00		287.00	748.79	582,064.01	29,778.86	159,467.43	189,246.29	15
					23,557.27	412.00		412.00	16
223,480.82	3,260.54	3,543.70	631.75	4,539.38	473,200.01	28,069.45	10,722.69	38,792.14	17
				624.67	17,286.84				18
			664.48		635,429.13		153.25	153.25	19
		200.00		3,821.91	83,496.62				20
	108.00	7,003.70		8,713.55	22,821.19		3,431.86	3,431.86	21
				114.49	158.74				22
				452.68	3,100.00				23
		69.76	3,940.00		5,397.10				24
					995,172.94				25
					3,087.62				26
	4,189.36	35.30	1,100.00	13,279.04	63,927.92	1,748.27	2,533.23	4,281.50	27
			147.50	3,373.80	135,149.19		37,217.53	37,217.53	28
		1,212.16			135,005.53	9,043.13	7,669.35	16,712.48	29
				463.65	61,988.29				30
				48.33	5,480.66				31
			164.28	93.92	499.93				32
					105,936.28				33
	247.00		247.75	1,473.16	22,155.07		5,874.20	5,874.20	34
			58.38		18,893.07		3,547.15	4,680.15	35
		247.50		1,248.34	11,924.97	657.81	53.20	711.01	36
				897.76	5,574.49	6,303.91	656.55	6,963.46	37
		919.49			14,529.93		570.99	570.99	38
		189.39		235.58	31,576.57	5,965.40	2,680.77	8,646.17	39
		97.17		318.10	545.78				40
		48,713.57			48,713.57				41
1,063,767.62	15,428.21	75,021.48	51,224.97	181,765.76	6,468,320.60	640,194.24	833,050.50	1,473,244.74	42

STATEMENT B—Continued.

TABLE 6.—Expenditures charged to each appropriation concerned for improvements to

[The shore stations at which these charges

	Appropriations.	TITLE E.						
		Land.	Buildings.	Quay walls.	Yard appliances.	Yard craft.	Furniture.	Dry docks.
1	Maintenance, Yards Docks.	\$1,539.05	\$9,035.43	.....	\$33,630.54	\$11,557.81	\$25,876.97	\$728.75
2	Repairs and preservation.	5,471.77	56,812.91	\$1,258.42	12,248.10	36.20	.....	15,305.40
3	Contingent, Yards and Docks.	377.96	965.13	.....	198.97	.....	.....	.....
4	Four timber dry docks.	.....	.....	.....	.....	.....	.....	126,119.03
5	Navy-yard, Portsmouth.	7,457.49	14,017.55	31,715.68	5,929.51	.....	.....	.....
6	Navy-yard, Boston.	27,865.81	94,534.27	2,036.71	7,287.97	.....	.....	1,992.01
7	Navy-yard, New York.	4,222.77	67,253.88	3,824.79	712.49	345.39	.....	667,995.79
8	Navy-yard, Philadelphia.	44,881.47	27,925.52	50,521.96	20,348.38	.....	.....	9.18
9	Navy-yard, Washington.	5,534.83	34,219.52	3,783.84	110.71	.....	.....	.....
10	Navy-yard, Norfolk.	16,417.74	69,770.29	9,005.59	61,783.67	.....	.....	7,645.89
11	Navy-yard, Charleston.	18,696.91	14,867.75	661.85	1,044.92	.....	.....	10,304.04
12	Naval station, Port Royal.	11,233.29	.....	.....	.....	.....	.....	.....
13	Navy-yard, Pensacola.	599.53	972.60	.....	.....	.....	.....	.....
14	Naval station, Key West.	25,196.82	108,641.80	.....	.....	.....	.....	.....
15	Naval station, New Orleans.	35,986.39	15,359.11	32.86	.....	.....	.....	.....
16	Naval training station, California.	.....	.....	.....	.....	.....	.....	.....
17	Naval training station, California, buildings.	9,872.33	6,982.58	.....	.....	.....	.....	.....
18	Navy-yard, Mare Island.	32,447.67	16,029.69	21,365.11	85,165.65	.....	.....	.....
19	Navy-yard, Puget Sound.	7,123.92	77,793.11	4,846.33	275.07	882.56	.....	223,262.15
20	Naval station, Guantanamo.	406.13	.....	.....	.....	.....	.....	.....
21	Naval station, Cavite, P. I.	.....	.....	.....	1,756.99	.....	.....	.....
22	Naval station, Olongapo.	64,023.04	32,929.65	29,460.05	393.92	.....	11.68	.....
23	Naval station, Guam.	29,799.28	.....	269.93	96.50	.....	.....	.....
24	Naval station, Pearl Harbor.	656,892.33	301,572.20	.....	16,483.18	.....	.....	.....
25	Consolidating power plants.	.....	.....	.....	.....	.....	.....	.....
26	Floating derricks.	.....	.....	.....	115,542.12	2,423.59	.....	.....
27	Equipment of vessels.	.....	3,106.90	.....	1,729.57	6,871.38	910.84	.....
28	Coal and transportation.	.....	49,602.89	.....	125.70	5,317.25	647.28	.....
29	Contingent, Equipment.	.....	.....	.....	.....	.....	67.50	.....
30	Ocean and lake surveys.	.....	.....	.....	.....	.....	.....	.....
31	Depots for coal.	23,917.22	.....	23,689.84	.....	.....	.....	.....
32	Ordnance and ordnance stores.	2,325.14	55,454.91	.....	64,158.41	64,386.46	6,203.94	.....
33	Repairs, Ordnance.	.....	8,532.79	75.67	.....	.....	.....	.....
34	Reserve torpedoes and appliances.	.....	.....	.....	.....	.....	.....	.....
35	Ordnance material, proceeds sale.	.....	.....	.....	.....	.....	.....	.....
36	Naval proving ground.	.....	7,110.91	.....	.....	.....	.....	.....
37	Torpedo station, Rhode Island.	216.00	.....	.....	.....	.....	56.42	.....
38	Torpedo station, building.	4,428.80	4,205.58	.....	.....	.....	.....	.....

STATEMENT B—Continued.

real estate and chattels (Title E, Industrial) and machinery plant (Title F) at shore stations.
 were made are specified in Table 5.]

TITLE E—continued.					TITLE F.				
Fire apparatus.	Tele-phones, tele-graphs, and tube systems.	Vehicles and live stock.	Miscellaneous.	Quarters.	Total Title E.	Power plant.	Machinery plant.	Total Title F.	
\$4,589.88	\$241.80	\$30,618.61	\$17,712.35	\$180.72	\$135,711.91	\$19,554.61	\$6,349.15	\$25,903.76	1
31.49	399.91	.....	9,320.07	.....	100,884.27	17,248.17	1,324.47	18,572.64	2
.....	.....	.....	.....	.....	1,542.06	.....	.....	.....	3
.....	.....	.....	.....	.....	126,119.03	.....	.....	.....	4
.....	.....	.....	.....	.....	59,120.23	8,865.72	.....	8,865.72	5
150.40	26.56	1.40	.....	.....	133,895.13	76,721.82	.....	76,721.82	6
.....	.....	.....	.....	.....	744,385.11	64,312.41	.....	64,312.41	7
.....	.....	.....	.....	.....	143,686.51	112,029.18	.....	112,029.18	8
369.46	118.72	.....	.....	.....	44,137.08	3,132.75	1,044.00	4,176.75	9
95.08	1,763.24	.....	.....	.....	166,481.50	117,884.79	.....	117,884.79	10
579.30	2,904.21	.....	.....	.....	49,058.98	40,861.51	.....	40,861.51	11
.....	.....	.....	.....	.....	11,233.29	.....	.....	.....	12
.....	.....	.....	.....	.....	1,572.13	1,786.38	760.46	2,546.84	13
.....	.....	.....	.....	.....	133,838.62	.....	.....	.....	14
.....	.....	.....	63.84	\$14.31	52,256.51	6,085.67	.....	6,085.67	15
18.00	.....	287.00	748.79	.....	1,053.79	.....	.....	.....	16
.....	.....	.....	.....	.....	16,854.91	412.00	.....	412.00	17
.....	.....	.....	750.29	.....	155,764.41	27,923.70	.....	27,923.70	18
3,260.54	3,563.70	.....	1,084.52	.....	322,091.90	10,724.45	.....	10,724.45	19
.....	.....	.....	.....	.....	406.13	.....	.....	.....	20
.....	.....	.....	.....	.....	1,756.99	.....	.....	.....	21
.....	1,212.16	.....	.....	226.33	128,296.83	8,433.28	1,026.27	9,459.55	22
4,189.36	.....	.....	1,459.24	.....	35,814.31	.....	480.08	480.08	23
.....	69.76	.....	.....	.....	975,017.47	.....	.....	.....	24
.....	.....	.....	.....	.....	.....	81,541.68	.....	81,541.68	25
.....	.....	.....	.....	.....	117,965.71	.....	.....	.....	26
.....	63,298.15	85.72	10,528.46	130.47	86,661.49	167.00	35,431.43	35,598.43	27
108.00	.....	817.69	1,704.02	.....	58,322.64	.....	1,200.00	1,200.00	28
.....	.....	.....	.....	.....	67.50	.....	.....	.....	29
.....	.....	.....	6,241.09	.....	6,241.09	.....	.....	.....	30
.....	.....	.....	.....	.....	47,607.06	.....	.....	.....	31
247.00	1,094.46	12,001.81	62,571.35	2,737.79	261,181.25	14,123.14	67,252.47	71,375.61	32
.....	.....	.....	81.03	.....	8,689.49	.....	635.00	635.00	33
.....	.....	.....	.....	.....	.....	.....	3,691.04	3,691.04	34
.....	.....	.....	.....	.....	.....	363.90	.....	363.90	35
.....	.....	.....	.....	.....	7,110.91	.....	573.77	573.77	36
.....	.....	.....	1,044.46	.....	1,310.88	22.50	64,788.56	64,811.06	37
.....	.....	.....	.....	.....	8,634.38	.....	10,149.09	10,149.09	38

STATEMENT B—Continued.

TABLE 6.—Expenditures charged to each appropriation concerned for improvements to stations—

Appropriations.	TITLE E.						
	Land.	Buildings.	Quay walls.	Yard appliances.	Yard craft.	Furniture.	Dry docks.
39 Naval magazine, New England coast.	\$105,936.28	\$178.21					
40 Naval magazine, New York Harbor.		17,454.46					
41 Naval magazine, Dover.		16,891.12					
42 Naval magazine, Fort Mifflin.		7,042.96					
43 Naval magazine, Norfolk.		5,397.17					
44 Naval magazine, Pensacola.	35.42						
45 Naval magazine, Mare Island.	306.38	10,443.22		\$1,954.08			
46 Naval magazine, Puget Sound.	8,022.63	19,133.36		857.44			
47 Naval magazine, Philippine Islands.							
48 Construction and repair.		41,421.00		23,614.88	\$215,779.97	\$3,833.20	\$9,801.23
49 Construction plant, Portsmouth.				246.67			
50 Construction plant, Boston.							
51 Construction plant, New York.							
52 Construction plant, Philadelphia.		3,046.06		1,689.95			
53 Construction plant, Norfolk.							
54 Construction plant, Charleston.		84.33		1,001.86			537.65
55 Construction plant, Port Royal.							
56 Construction plant, Pensacola.							
57 Construction plant, New Orleans.							
58 Construction plant, Mare Island.							
59 Construction plant, Puget Sound.				937.67			
60 Steam machinery.		4,234.78		1,999.05	24,234.02	879.42	
61 Machinery plant, Portsmouth.							
62 Machinery plant, Boston.							
63 Machinery plant, New York.							
64 Machinery plant, Philadelphia.							
65 Machinery plant, Norfolk.							
66 Machinery plant, Charleston.							
67 Machinery plant, Pensacola.							
68 Machinery plant, New Orleans.							
69 Machinery plant, Mare Island.							
70 Machinery plant, Puget Sound.							
71 Machinery plant, Olongapo.							
72 Provisions, navy.							
73 Contingent, Supplies and Accounts.		28.25		41.00		13,353.14	
74 Medical Department.							
75 Repairs, Medicine and Surgery.		9,854.68					

STATEMENT B—Continued.

real estate and chattels (Title E, Industrial), and machinery plant (Title F), at shore Continued.

TITLE F.								
Fire apparatus.	Tele- phones, tele- stand, and tube systems.	Vehicles and live stock.	Miscella- neous.	Quarters.	Total Title E.	Power plant.	Machinery plant.	Title F.
					\$106,114.49			39
					17,454.46	\$1,142.00	\$1,135.15	\$2,277.15
					16,891.12			41
			\$113.20		7,156.16	657.81		657.81
					5,397.17	6,306.91		6,306.91
					35.42			44
	\$169.70		447.83		13,321.21			45
	189.39				28,202.82	5,965.40		5,965.40
			121.50		121.50			47
	42.70	\$50.00	15,063.22		310,206.20	7,238.95	160,442.41	167,681.36
					246.67		11,760.26	11,760.26
							17,842.89	17,842.89
							11,390.08	11,390.08
	102.02		402.24		5,240.27		11,193.70	11,193.70
							26,005.76	26,005.76
			379.69		2,003.53		19,536.41	19,536.41
							13,741.94	13,741.94
							716.93	716.93
							1,801.98	1,801.98
							17,721.15	17,721.15
					957.67		3,662.64	3,662.64
		73.85	3,188.02		34,609.14	609.85	93,481.51	94,091.36
							31,100.61	31,100.61
							10,173.71	10,173.71
							17,727.63	17,727.63
			1,345.97		1,345.97		7,454.57	7,454.57
							12,084.95	12,084.95
							2,999.74	2,999.74
							4,907.36	4,907.36
							964.57	964.57
							32,994.27	32,994.27
							6,012.35	6,012.35
							4,297.20	4,297.20
			24.70		24.70			72
			3,332.08		16,754.47	133.60		133.60
			225.00		225.00			74
			109.31		9,963.99			75

STATEMENT B—Continued.

TABLE 6.—Expenditures charged to each appropriation concerned for improvements to stations—

Appropriations.	TITLE E.						
	Land.	Buildings.	Quay walls.	Yard appliances.	Yard craft.	Furniture.	Dry docks.
70 Contingent, Medicine and Surgery.						\$1,233.21	
77 Naval hospital, Annapolis, Md.		\$71,551.65					
78 Naval hospital, Great Lakes.		96,830.20					
79 Naval hospital, Mare Island.		18,948.10					
80 Naval hospital, Puget Sound.		471.07					
81 Naval hospital, Yokohama, Japan.		4,666.26					
82 Naval hospital fund.	\$124,169.35	644,230.70	\$2,162.64	\$4,060.00		6,710.39	\$66.80
83 Naval training station, Rhode Island.	6,487.43					189.85	
84 Naval training station, Rhode Island, buildings.	16,774.60	4,017.67					
85 Naval training station, Great Lakes.	44,010.92			1,750.00		1,388.25	
86 Naval training station, Great Lakes, buildings.		420,456.45					
87 Care of lepers, island of Guam.		2,916.43					
88 Naval training station, California, buildings.	5,267.66						
89 Buildings, Bureau of Steam Engineering, Annapolis, Md.		9,137.75					
90 Engineering experimental station, Naval Academy.						150.68	
91 Special course, Naval Academy.						20.25	
92 Repairs, Naval Academy.						4,175.57	
93 Heating and lighting, Naval Academy.							1,187.75
94 Contingent, Naval Academy.							
95 Gunnery exercises.	42.75					64.67	
96 Buildings and grounds, Naval Academy.	75,000.00	112,341.20					
97 Increase navy, gun plant, Washington.						1,144.04	
98 Increase navy, armor and armament.							
99 Ammunition, ships navy.							
100 Floating crane, Hercules.					\$2,440.02		
Total	1,422,987.11	2,598,474.05	184,711.27	467,194.97	334,274.65	68,105.05	1,063,767.62

STATEMENT B—Continued.

real estate and chattels (Title E, Industrial), and machinery plant (Title F), at shore
Continued.

TITLE F.								
Fire apparatus.	Tele- phones, tele- standt, and tube systems.	Vehicles and live stock.	Miscella- neous.	Quarters.	Total Title E.	Power plant.	Machinery plant.	Title F.
		\$5,914.60			\$7,147.81			76
					71,551.65			77
					96,830.20			78
					18,948.10			79
					471.07			80
					4,666.26			81
\$1,789.70	\$425.00		\$18,889.02 538.45	\$675.84	800,964.44 9,430.43			82 83
					20,792.27	\$5,429.70		\$5,429.70 84
		664.48			47,813.65		\$153.25	153.25 85
					420,456.45			86
			150.68		3,067.11			87
					5,267.66			88
					9,137.75		2,899.72	2,899.72 89
					150.68			90
					20.25			91
					4,175.57			92
			5,392.00		5,392.00			93
		710.00			1,897.75		5,310.00	5,310.00 94
					107.42			95
			27,744.26		215,085.46			96
					1,144.04	513.36	118,182.02	118,696.28 97
			382.50		382.50		554.26	554.26 98
							94.79	94.79 99
					2,440.02			100
15,428.21	75,621.48	51,224.97	181,765.76	4,765.46	6,468,320.00	640,194.24	833,050.50	1,473,244.74

T^he bills applied directly to object, amount paid for labor and material drawn from store.

	Care and preservation of ships in ordinary.	Office force.	Heat, light, fuel, and water.	Hand tools and repair of same.	Handling stores.	Miscellaneous.	Total.	
1			\$18,421.18			\$15,940.10	\$38,466.07	1
2			241.64			50,613.34	68,037.09	2
3	\$264.04	\$30,951.73	23,153.56	\$3,586.50	\$54,422.90	100,014.79	292,163.74	3
4		2,980.13	35,291.71	22.79	3,607.84	50,903.20	143,129.01	4
5		5,928.49	303.41			16,406.19	26,618.78	5
6			405.96		301.60	1,377.59	7,466.07	6
7			262.52			324,548.28	352,338.42	7
8			7.00			84,473.73	89,914.54	8
9			1,441.59			61,848.68	75,634.16	9
10						641,291.30	646,236.88	10
11		178,543.28	23,906.05	2,864.21	2,002.63	210,232.56	530,192.72	11
12						234.01	8,000.74	12
13		17,350.58	7,632.76	2,224.63	10,695.30	19,937.88	121,896.77	13
14			180.22			111,406.65	115,163.65	14
15						7,343.71	7,343.71	15
16			4,077.84			18,001.42	27,224.87	16
17		12,106.82	2,212.91	425.12	6,332.25	24,080.91	83,693.10	17
18	26.00	18,013.13	7,402.77	3,946.05	8,566.74	35,074.21	144,148.01	18
19	1,724.87	16,151.36	5,993.74	1,153.75	2,123.69	7,967.23	94,061.77	19
20		11,157.92	10,016.39	817.68	14,247.12	28,114.45	117,530.16	20
21		2,988.56	4,205.61		4,137.21	19,697.70	47,337.05	21
22			87.95	49.40	748.90	5,406.00	11,938.94	22
23			5,303.08			62,134.01	77,581.49	23
24		3,386.41	22,514.47		492.00	12,781.43	81,284.50	24
25			8,034.94			18,492.91	27,290.21	25
26		22,576.11	1,407.07	126.32	43,126.35	8,192.02	112,030.81	26
27		5,007.50	3,676.82	503.86	1,951.63	8,389.20	38,635.66	27
28		9,884.78	20,647.78	1,251.97	4,857.00	26,421.64	98,580.55	28
29	18,429.14	51,864.04	6,020.80		14,069.15	375,906.85	744,320.28	29
30	21,231.85	24,321.50	16,440.26	6,172.34	3,152.66	68,737.60	303,634.88	30
31							1,034.74	31
32		602.68		90.46	6,201.96	30,884.21	44,653.04	32
33		3,779.88			30,201.42	575.15	116,662.92	33
34		2,661.28	1,048.50	21.07	12,527.81	15,042.51	42,767.97	34
35		1,883.56	241.50		30,009.82	52,345.05	52,345.05	35
36		4,414.92	778.26	787.21	10,224.13	37,680.15	73,385.62	36
37		59.86		759.01	2,501.85	4,533.84	10,925.13	37
38		4,079.46	3.99	103.63		12,296.32	17,510.65	38
39			398.79		6,618.18	938.42	7,955.39	39
40			1,465.33		2,829.11	32,161.95	88,934.31	40
41						4,664.77	4,664.77	41
42			98.31		8,255.74	21,325.60	32,232.31	42
43			641.54	19.15	193.60	12,096.49	13,026.25	43
44			3,357.40		1,180.78	32,400.52	37,591.06	44
45						4,371.83	4,386.57	45
46		12,456.22	9,255.70	921.89		72,661.09	150,727.59	46
47		30,680.10				247,138.60	241,838.65	47
48						4,053.12	4,053.12	48
49						284.96	2,168.89	49
50						790.10	780.10	50
51						29,770.73	26,778.73	51
52						2,359.82	2,359.82	52
53			247.16			39,344.11	62,510.84	53
	44,675.90	474,442.30	247,855.51	25,355.44	277,316.66	2,963,980.68	5,434,325.24	

and F) and incidental maintenance charges (Title G).

Care and preserva- tion of ships ordinary.	Office force.	Heat, light, fuel, and water.	Hand tools and repairs of same.	Handling stores.	Miscellaneous.	Total Title G.	
	\$61,175.63	\$121,038.55	\$2,738.11	\$91.21	\$68,000.23	\$431,869.99	1
		809.71			4,156.67	209,149.37	2
					2,865.76	16,560.51	3
						547.83	4
						55.00	5
						16.60	6
		30.60			685.40	3,376.38	7
		67.95			312.29	1,857.96	8
						1,356.24	9
						9,136.39	10
						5,437.87	11
						2,911.04	12
						3,848.61	13
						39.50	14
	26,353.67					26,353.67	15
6,353.94	25,289.91	8,958.00	263.46	151.16	59,730.57	206,092.59	16
8,062.94	2,903.30	11,509.46	19.15	79,279.05	203,281.78	366,363.54	17
	23.06			204.50	766.54	1,023.38	18
	116.14				1,312.53	1,428.67	19
					229.32	863.01	20
						7,796.73	21
8,239.15	67,471.23	12,878.59	4,503.59	98,869.29	214,392.64	580,889.89	22
	43.04	1,150.13		23,717.55	15,462.15	40,362.87	23
		5,733.60		9,772.37	50,221.58	74,910.03	24
					95.16	96.16	25
		9,957.11	3,052.07		12,103.67	18,109.85	26
		130.31			10,088.22	63,728.46	27
		979.26			5,769.73	5,769.73	28
					122.88	18,128.54	29
					599.71	1,660.97	30
						2,400.00	31
						1,034.74	32
						6,331.29	33
					33.22	33.22	34
13,114.11	100,324.33	2,797.35	8,639.12	3,766.94	113,324.16	474,320.71	35
8,883.70	16,348.23	1,424.45	4,827.50	1,595.43	67,446.66	266,182.76	36
	103,170.66			45,330.85	138,706.56	293,500.55	37
	569.32	15.90	38.32	645.42	21,444.29	21,444.29	38
	30,686.10				34,222.44	39,219.36	39
		84.02			238,628.29	269,314.39	40
		193.38			10,840.64	24,387.04	41
	89.03	259.21			23,652.51	26,273.20	42
					20,879.51	23,725.08	43
					790.59	1,313.09	44
					6.40	6.40	45
					12,631.95	15,079.24	46
	309.84	34,649.42	22.79		10,761.25	81,257.04	47
	9,802.88	9,255.70	921.89		53,980.48	98,776.31	48
		21,581.50			9,073.21	61,962.41	49
			29.35		3,911.13	4,443.27	50
		1,441.69			53,838.83	67,614.30	51
						1,533.40	52
					488.92	5,860.18	53
						546.27	54
						716.48	55
					18,834.27	18,834.27	56
					287.40	257.40	57
					314,140.11	814,140.11	58
					3,858.92	3,858.92	59
					36,126.41	36,280.96	60
					64,747.34	64,747.34	61
					92,795.65	96,141.30	62
						1,250.00	63
					42.00	42.00	64
	26,413.93	95.90			192,092.24	218,114.07	65
		2,397.55		14,032.88	5,889.70	22,290.13	66
		393.66			70.05	70.05	67
					709,830.23	770,565.19	68
					7.50	7.50	69
44,675.90	474,442.30	247,855.51	25,355.44	277,316.06	2,963,980.68	5,434,325.24	

STATEMENT B.

TABLE 9.—Expenditures for repairs to the equipage of vessels of the navy in commission (Title P), showing the appropriations concerned with such expenditures.

Ship.	Equip-ment of vessels.	Bureau of Ordnance appropriations.	Construc-tion and repair.	Steam machinery.	Total.
Abarenda.....	\$44.98				\$44.98
Adder.....		\$53.32			53.32
Alleen.....			\$4.68		4.68
Ajax.....	4.88				4.88
Alabama.....		2,609.82			2,609.82
Albany.....	1,283.24	8.25	1,385.33	\$156.05	2,802.87
Alice.....	27.75		117.26		145.01
Amphitrite.....	24.78		119.68		144.46
Annapolis.....			78.00		78.00
Arayat.....		69.03			69.03
Arethusa.....	407.08		12.85	11.65	431.58
Atlanta.....			493.02	746.90	1,239.92
Bailey.....			7.40		7.40
Bainbridge.....		584.83		56.59	641.42
Barney.....	40.01				40.01
Barry.....	39.81	391.09	162.84	43.62	637.36
Birmingham.....	383.49	126.48	132.19	65.05	707.21
Blakely.....			7.44		7.44
Brutus.....	154.97				154.97
Buffalo.....	689.43	50.14	1,391.26	4.20	2,135.03
Cæsar.....	96.73		13.74	22.92	133.39
California.....	2,534.13	6,889.48	5,530.28	278.60	15,232.55
Castine.....	125.77		126.27	83.55	335.59
Celtic.....	314.43		338.05		652.48
Charleston.....	73.60	20.05	171.93		265.64
Chattanooga.....	99.00	110.48	409.00	318.06	936.54
Chauncey.....	48.15	416.00		61.07	525.22
Chester.....	792.26		329.11	821.55	1,942.92
Cheyenne.....	43.76	2,440.32		135.59	2,619.67
Chicago.....	541.40			1,158.54	1,699.94
Choctaw.....			10.16		10.16
Cleveland.....	35.78			14.96	50.74
Colorado.....	2,476.14	712.44	4,425.41	1,502.63	9,116.62
Connecticut.....	2,983.81	482.47	6,374.11	2,050.25	11,890.64
Culgoa.....			15.25		15.25
Cumberland.....	584.25				584.25
Cushing.....			23.13		23.13
Dale.....	153.29	480.49	102.62	8.12	753.52
Davila.....	137.22	380.69	4.50		522.41
Decatur.....	837.38	73.71	121.97		1,033.06
Delaware.....	40.85		508.72		549.57
Denver.....	38.34	10.51	343.26		392.11
Des Moines.....	880.62	208.81	1,531.82		2,620.25
Dixie.....			19.26		19.26
Dolphin.....	751.74		339.47	468.99	1,560.00
Dubuque.....	548.72	488.71	402.34	164.39	1,602.16
Eagle.....	254.80		968.12	130.17	1,353.15
Farragut.....	124.55	304.66	378.67		807.88
Flusser.....		36.24	174.01	22.17	232.42
Fortune.....	69.61		408.06	13.63	491.30
Fox.....		27.62			27.62
Franklin.....	705.81		2,107.30	1,332.05	4,145.22
Galveston.....	528.88				528.88
Georgia.....	1,063.29	244.45	2,012.47	98.81	3,419.02
Glacier.....	760.05		1,856.06	155.96	2,781.07
Gloucester.....	11.84			38.92	50.76
Goldsborough.....	62.96	2,709.87		96.28	2,869.11
Grampus.....	60.69		15.38		76.07
Hancock.....	310.74		2,003.76	3,308.67	5,623.17
Hannibal.....	6.09				6.09
Hartford.....	14.88				14.88
Hector.....	63.88			10.73	74.61
Hist.....	60.41			245.64	306.05
Hopkins.....	100.92	561.22	119.28	47.57	828.99
Hull.....	27.05	194.23	75.87	16.73	313.89
Idaho.....	470.81	50.09	2,432.20	16.14	2,969.24
Independence.....	556.68		78.79	201.60	837.07
Indiana.....	875.83	100.51	2,015.53		2,991.87
Iowa.....				50.86	50.86
Iris.....	409.51		586.35	32.98	1,028.84
Iwana.....	3.24				3.24
Justin.....	450.27		120.97		571.24
Kansas.....	956.49	61.14	2,805.54	37.38	3,900.55
Kearsarge.....	3.38		1,287.30		1,290.68
Kentucky.....	314.89		629.52	292.58	1,237.99
Lancaster.....			298.11		298.11

STATEMENT B—Continued.

TABLE 9.—Expenditures for repairs to the equipage of vessels of the navy in commission (Title P), showing the appropriations concerned with such expenditures—Continued.

Ship.	Equip-ment of vessels.	Bureau of Ordnance appropriations.	Construc-tion and repair.	Steam machinery.	Total.
Lawrence.....	\$27.15	\$117.23	\$189.14	\$432.13	\$765.65
Lebanon.....	59.72				59.72
Leonidas.....				11.97	11.97
Lincoln.....	140.45				140.45
Louisiana.....	565.15	65.22	2,650.97	176.76	3,458.10
Machias.....	128.53		904.80	1,485.85	2,519.18
Maine.....				137.94	137.94
Marblehead.....		26.67	429.20		455.87
Marcellus.....	95.31		50.14		145.45
Marietta.....	588.86	253.97	2,337.08	522.14	3,702.05
Mars.....	74.73		22.38	3.45	100.56
Maryland.....	1,980.37	4,499.95	2,908.22	472.38	9,860.92
Massachusetts.....	126.86				126.86
Massasoit.....	29.83		34.22	2.88	66.93
Mayflower.....	219.84		861.65	1,455.18	2,566.67
Michigan.....	30.45		267.55		298.00
Milwaukee.....	255.19	142.19		38.34	435.72
Mindoro.....	6.35		74.56		80.91
Minnesota.....	445.82	349.22	1,823.01	413.91	3,031.96
Mississippi.....	674.82	44.67	2,120.61		2,840.10
Missouri.....	2,331.97	4,627.91	2,677.05	4,136.43	13,773.36
Moccasin.....	42.76	84.81	33.74		161.31
Mohawk.....				3.90	3.90
Mohienn.....			6.38		6.38
Montana.....	1,306.33	421.67	915.41	7.87	2,651.28
Monterey.....	32.51		362.44	26.78	421.73
Montgomery.....	152.28		750.66	218.82	1,121.76
Nanshan.....			3.65	8.59	12.24
Narkeeta.....	16.10				16.10
Navajo.....	21.46		269.77		291.23
Nebraska.....	4,666.81	214.08	3,222.60	348.73	8,452.82
New Hampshire.....	1,282.98	13.16	3,946.22	84.13	5,326.49
New Jersey.....	112.06	1,121.40	1,622.93	295.32	3,151.71
New Orleans.....	26.67	793.70	829.11	317.83	1,967.31
New York.....	42.28	515.25	490.15		1,047.68
Nipsic.....	84.41				84.41
North Carolina.....	413.47	876.76	1,784.90	96.36	3,171.49
North Dakota.....			2.56		2.56
Octopus.....	18.30				18.30
Ohio.....	244.39		363.34		607.73
Onelia.....			159.03		159.03
Oscocia.....	9.34		32.25		41.59
Ozark.....	77.77	6.53	1,387.71	462.70	1,934.71
Paducah.....	254.74	345.93	1,072.74	493.81	2,167.22
Panther.....	69.29		228.94		298.23
Paragua.....	25.33				25.33
Patapasco.....	17.31		211.12	5.56	233.99
Patuxent.....			172.19		172.19
Paul Jones.....	458.94	791.59	322.03	16.91	1,589.47
Pawtucket.....	32.75				32.75
Pennacook.....	1.56		49.03		50.59
Pennsylvania.....	1,356.80	5,722.43	4,283.73	112.80	11,475.76
Pensacola.....			41.29		41.29
Perry.....	211.33	160.87	181.19	141.65	695.04
Petrel.....	21.88	33.07			54.95
Philadelphia.....	243.72		128.42	427.52	800.66
Pike.....	60.57		4.87		65.44
Pompey.....	14.29		164.14		178.43
Porpoise.....		128.17	56.51		184.68
Porter.....	103.96				103.96
Prairie.....	282.85		76.49	1,385.01	1,744.35
Preble.....	113.51	134.06	460.83	13.02	721.42
Princeton.....	21.58				21.58
Prometheus.....		7.78	137.30	122.22	267.30
Rainbow.....	449.86		72.29	371.42	893.57
Reid.....		67.92			67.92
Relief.....	9.62		55.80	280.50	345.92
Restless.....	42.37				42.37
Rhode Island.....	1,338.57	288.83	3,901.62	62.47	5,591.49
Richmond.....			54.32	60.26	114.58
Rocket.....	4.40				4.40
Rodgers.....	1.70				1.70
Rowan.....		79.76	83.38		163.14
Salem.....	175.76	56.62	141.69	29.26	403.33
Saturn.....	112.35		.51	18.74	131.60

STATEMENT B—Continued.

TABLE 9.—Expenditures for repairs to the equipage of vessels of the navy in commission (Title P), showing the appropriations concerned with such expenditures—Continued.

Ship.	Equip-ment of vessels.	Bureau of Ordnance appropriations.	Construc-tion and repair.	Steam machinery.	Total.
Shark.....		\$59.66			\$59.66
Sioux.....	\$1.57				1.57
Solace.....	255.12		\$488.06	419.83	1,113.01
Sotoyomo.....	103.32				103.32
South Carolina.....			318.70	6.48	325.18
South Dakota.....	1,432.51	1,793.09	694.81	21.82	4,042.83
Southern.....	387.59		195.45		583.04
St. Louis.....	522.33		461.85	11.36	995.54
Standish.....	5.39				5.39
Sterling.....	4.37				4.37
Stewart.....	171.27	175.26	354.73	242.74	944.00
Stringham.....			34.73		34.73
Supply.....	131.39		350.49	38.46	520.34
Sylph.....			650.42	494.56	1,144.98
Tacoma.....	324.71	157.85	2,370.18	128.68	2,981.42
Tallahassee.....			83.24		83.24
Tarantula.....	9.99				9.99
Tennessee.....	2,079.06	779.65	2,405.16	398.13	5,662.00
Texas.....	10.49		1,356.52	872.74	2,239.75
Thornton.....			66.13	120.95	187.08
Tonopah.....	74.17		1,560.80	532.19	2,187.16
Topeka.....			3.95		3.95
Triton.....			157.02		157.02
Truxtun.....	9.56	102.41	52.60	97.54	262.11
Unadilla.....	99.62		60.32	8.07	168.01
Uncas.....	.37				.37
Vermont.....	579.45	7,267.21	365.63	68.97	8,281.26
Vestal.....	115.75			114.98	230.73
Vicksburg.....	1,195.64	872.13	302.02	639.19	3,008.98
Villalobos.....		8.74			8.74
Viper.....	10.98				10.98
Virginia.....	262.47	76.08	3,716.86	200.30	4,261.71
Vulcan.....	52.19			5.33	57.52
Wabash.....	251.07		271.66	404.27	927.00
Wahnetta.....			12.59		12.59
Washington.....	1,668.85	1,020.25	2,540.49	430.23	5,659.82
Wasp.....	143.00		579.81		722.81
West Virginia.....	2,456.57	7,227.00	4,707.27	1,310.35	15,701.19
Whipple.....	74.54	59.75	319.54	372.02	825.85
Wilkes.....			199.85	8.52	208.37
Wisconsin.....	451.90	7.11	2,144.07	65.32	2,668.40
Wolverine.....	67.18				67.18
Wormpatuk.....	308.19		117.53		425.72
Yankee.....	156.64		613.67	31.90	802.21
Yorktown.....	82.06	69.53	20.00	7.49	179.08
Total title P.....	60,790.13	62,592.48	118,366.71	36,159.11	277,908.43

Appropriations.

Equipment of vessels.....	\$60,790.13
Ordnance and ordnance stores.....	59,982.66
Fire control, ships navy (Alabama).....	2,609.82
Construction and repair.....	118,366.71
Steam machinery.....	36,159.11
Total.....	277,908.43

STATEMENT B—Continued.

TABLE 10.—Expenditures at shore stations on account of improvements to real estate and chattels (Title R—Military), including public bills applied directly to objects.

[For the appropriations charged with these expenditures, see Table 11.]

Navy-yards.	Grounds.	Quarters and offices.	Water front.	Official craft.	Official furniture.	Fire protection.	Telephone, telegraph, and tube system.	Official vehicles.	Miscellaneous.	Total.
Portsmouth, N. H.	\$2,211.80	\$5,794.36	\$119.66		\$2,459.10		\$1.52		\$6,545.00	\$17,131.44
Boston, Mass.	3,648.62	813.64	21,498.10		3,111.03	\$284.01		\$2,136.53	13,539.54	45,031.47
New York, N. Y.	2,326.83	5,523.49	56,145.44	\$2,942.63	5,473.85	796.50	6,704.00	3,384.12	6,214.81	89,511.67
Philadelphia, Pa.	4,092.58	6,805.52	131,158.02	8,566.73	2,377.66	1,262.26	265.74	181.80	16,962.82	171,700.13
Norfolk, Va.			184,635.21						102.36	184,767.57
Charleston, S. C.	2,354.70	898.88	31,030.86		1,434.03	1,198.06	344.22	198.36		38,049.11
Mare Island, Cal.	383.49	2,496.67	97,487.96		6,078.53		1,957.97			109,348.10
Puget Sound, Wash.	1,511.72	15,708.52	340.89		102.48					17,663.61
Total.....	16,539.74	38,041.08	523,063.14	11,509.36	21,036.78	3,540.83	9,273.45	5,900.81	44,297.91	673,203.10

STATEMENT B—Continued.

TABLE 11.—Expenditures charged to each appropriation concerned on account of improvements to real estate and chattels (Title R—Military), including public bills applied directly to objects.

[Shore stations charged with these expenditures are shown in Table 10.]

Appropriations.	Grounds.	Quarters and offices.	Water front.	Official craft.	Official furniture.	Fire protection.	Telephone, telegraph, and tube system.	Official vehicles.	Miscellaneous.	Total.
Maintenance, Yards and Docks.....	\$159.50	\$284.60	\$373.61	\$6,590.16	\$19,214.21	\$2,598.51	\$322.75	\$2,804.44	\$2,223.09	\$34,571.47
Repairs and preservation.....	9,847.30	19,146.20	3,317.42	.....	.....	363.17	1,531.61	36.58	1,265.31	35,477.59
Navy-yard, Portsmouth.....	.....	346.03	.....	.....	.....	.....	.....	.....	3,010.52	3,356.55
Navy-yard, Boston.....	.....	.....	21,498.10	.....	.....	.....	.....	.....	.....	21,498.10
Navy-yard, New York.....	.....	.....	53,776.74	.....	.....	.....	.....	.....	.....	53,776.74
Navy-yard, Philadelphia.....	2,701.43	5,056.37	131,179.83	.....	.....	.....	.....	.....	.....	138,937.63
Navy-yard, Norfolk.....	.....	.....	184,665.21	.....	.....	.....	.....	.....	.....	184,665.21
Navy-yard, Charleston.....	.....	.....	31,360.59	.....	.....	.....	.....	.....	.....	31,360.59
Navy-yard, Mare Island.....	.....	.....	96,891.64	.....	.....	.....	.....	.....	.....	96,891.64
Contingent, Yards and Docks.....	17.26	.....	.....	.....	.....	355.14	.....	.....	.....	372.40
Equipment of vessels.....	.....	.....	.....	574.42	.....	.....	7,419.09	.....	5,147.65	13,141.16
Ocean and lake surveys.....	.....	.....	.....	.....	.....	.....	.....	.....	425.91	425.91
Coal and transportation.....	.....	13,180.88	.....	.....	.....	.....	.....	.....	.....	13,200.69
Ordnance and ordinance stores.....	3,625.90	27.00	.....	.....	784.99	284.01	.....	2,099.95	1,310.26	8,132.11
Construction and repair.....	.....	.....	.....	4,075.47	.....	.....	.....	.....	.....	15,367.37
Steam machinery.....	.....	.....	209.31	.....	.....	.....	.....	.....	.....	209.31
Repairs, Medicine and Surgery.....	100.00	.....	.....	.....	.....	.....	.....	.....	433.99	433.99
Contingent, Medicine and Surgery.....	.....	.....	.....	.....	953.08	.....	.....	.....	.....	2,093.53
Pay, miscellaneous.....	88.35	.....	.....	.....	.....	.....	.....	.....	17,516.98	17,605.33
Gunnery exercises.....	.....	.....	.....	.....	84.50	.....	.....	.....	481.44	1,525.78
Naval hospital fund.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	16,839.74	38,041.08	\$22,063.14	11,509.36	21,036.78	3,540.83	9,273.45	5,900.81	44,297.91	673,203.10

STATEMENT B—Continued.

TABLE 12.—Expenditures at shore stations for general maintenance of real estate and chattels (Title S—Military), including public bills applied directly to objects.

[For appropriations charged with these expenditures see Table 13.]

Navy-yards.	Grounds.	Quarters and offices.	Water front.	Official craft.	Official furniture.	Fire protection.	Telephone, telegraph, and tube system.	Official vehicles.	Heat, light, fuel, and water.	Military administration.	Inspection department.	Miscellaneous.	Total.
Portsmouth, N. H.	\$5,370.53	\$16,480.71	\$2,186.67	\$3,301.26	\$3,238.48	\$3,146.61	\$1,578.44	\$1,841.36	\$31,732.89	\$11,965.88	\$12,798.88	\$91,865.79	\$188,527.50
Boston, Mass.	7,016.04	35,402.14	3,152.41	1,543.78	6,324.42	1,226.55	1,531.83	1,900.55	14,988.37	11,189.51	80,444.18	139,744.93	304,466.71
New York, N. Y.	29,660.20	51,243.15	4,963.85	25,099.61	4,032.27	9,633.87	4,843.38	880.20	65,108.06	43,401.97	61,279.95	264,372.47	568,495.96
Philadelphia, Pa.	24,063.04	28,402.36	4,289.88	4,596.97	1,040.05	599.40	2,129.45	7,517.12	27,314.18	1,879.63	186,155.38	44,728.38	332,625.84
Norfolk, Va.	34,328.18	83,983.16	20,844.38	24,448.84	7,778.88	8,737.43	7,076.56	1,825.99	61,717.97	15,937.71	92,833.55	105,666.48	465,199.13
Charleston, S. C.	17,663.81	5,832.27	865.19	6,819.21	51.86	.....	2,596.73	3,040.54	9,962.17	7,360.66	15,973.48	29,568.10	96,706.02
Mare Island, Cal.	22,412.38	22,898.11	11,631.16	14,263.84	7,093.67	3,374.13	24,289.89	9,098.81	48,040.58	18,712.25	74,091.99	178,112.50	433,832.31
Puget Sound, Wash.	12,666.35	115,069.42	5,083.47	4,528.98	2,763.87	984.18	1,053.01	3,953.86	44,157.49	8,419.35	26,314.87	41,116.38	265,504.23
Total.....	156,570.53	362,213.32	33,020.01	84,516.49	32,323.50	27,634.17	45,071.29	29,970.43	303,081.71	118,996.96	549,894.28	895,195.03	2,658,357.72

STATEMENT B—Continued.
 TABLE 13.—Expenditures charged to each appropriation concerned on account of general maintenance of real estate and chattels (Title S—Military).
 [Shore stations charged with these expenditures are shown in Table 12.]

Appropriations.	Grounds.	Quarters and offices.	Water front.	Official craft.	Official furniture.	Fire protection.	Tele- phone, telegraph, and tube system.	Official vehicles.	Heat, light, fuel, and water.	Military adminis- tration.	Inspection depart- ment.	Miscella- neous.	Total.
Maintenance, Yards and Docks.	\$121,631.50	\$67,654.82	\$13,746.96	\$18,020.58	\$24,477.72	\$24,112.51	\$9,808.92	\$29,617.37	\$394,339.00	\$15,423.02	\$110,980.81	\$70,673.55	\$771,086.59
Repairs and preservation.	31,483.69	186,057.24	30,893.04	8.14	1,527.25	250.98	2,873.95	1.50	15,303.69			15,794.00	284,199.79
Contingent, Yards and Docks	488.72	719.78	7,809.47			643.63			1,047.37			315.00	11,084.17
Equipment of vessels				3,453.10			31,192.84		822.30	2,177.59	40,583.19	14,851.40	93,090.42
Increase navy equipment.		776.44		760.38					17,024.07	328.19	782.40	68,761.21	88,632.09
Coal and transportation.					42.76	2.83		331.56	553.04	2,724.10	58,932.21	58,653.79	122,733.04
Ordnance and ordnance stores.	507.43	953.32										285.10	373.10
Repairs, Ordnance.		130.06											
Increase navy, armor and armament.											246.45		246.45
Ammunition, ships, navy.												1,519.02	1,519.02
Contingent, Ordnance.	31,483.69								2.65		47.09	137.87	187.61
Contingent, Navigation.										228.38			228.38
Increase navy, torpedo boats.											33.01		33.01
Increase navy, purchase steamship.			568.31				229.75			1,883.32	48.83	1,065.76	1,114.59
Increase navy, construction and machinery.				29,221.96							134,538.39	16,133.40	182,515.13
Steam machinery.				30,542.49						4,510.11	2,742.59		2,742.59
Provisions, navy.				1,900.84			479.35			126.01	103,345.50	481,794.57	587,565.27
Contingent, Supplies and Ac- counts.					6,053.85								6,053.85
Medical Department.					161.72								161.72
Naval hospital fund.		242.33							301.45				301.45
Repairs, Medicine and Sur- gery.	2,406.59	1,333.33			58.20	2,624.22	486.46		2,244.70			1,838.07	11,011.65
Contingent, Medicine and Surgery.		1.56											1.56
Pay, miscellaneous.		1,389.63							1,323.92	91,266.24	3,138.00	3,980.13	3,980.13
Gunners' exercises.		2.20							25.26			538.93	538.93
Naval magazine, New Eng- land coast.	50.69												50.69
Freight, Bureau of Supplies and Accounts.												4,414.94	4,414.94
Naval hospital, Puget Sound.		102,962.67										608.86	608.86
Total.	156,570.33	365,213.32	53,020.01	84,516.49	32,233.50	27,034.17	45,071.29	29,970.43	303,081.71	118,806.96	549,894.28	895,195.03	2,658,357.72

STATEMENT B—Continued.

TABLE 14.—Expenditures at each navy yard on account of maintenance of tugs and lighters, care and preservation of ships in ordinary, and fleet supply including public bills applied directly to objects (Title T).

[For the appropriations charged with these expenditures see Table 15.]

Navy-yards.	Tugs and lighters.	Care and preservation of vessels.	Fleet supply.	Total.
Portsmouth, N. H.	\$546.44	\$11,105.33	\$329.86	\$11,981.63
Boston, Mass.	9,335.36	32,083.10		41,418.46
New York, N. Y.	67,554.34	62,597.03	76,361.51	206,512.88
Philadelphia, Pa.	9,485.33	78,571.62	40,158.75	128,215.70
Norfolk, Va.	33,506.20	52,973.16		86,479.36
Charleston, S. C.	8,290.53	2,944.18	2,360.25	13,594.96
Mare Island, Cal.	27,611.79	66,632.17		94,243.96
Puget Sound, Wash.	22,333.89	37,246.14	31,986.08	91,566.11
Total	178,663.88	344,152.73	151,196.45	674,012.06

TABLE 15.—Expenditures charged to each appropriation concerned on account of maintenance of tugs and lighters, care and preservation of ships in ordinary, and fleet supply (Title T).

[Shore stations charged with these expenditures are shown in Table 14.]

Appropriations.	Tugs and lighters.	Care and preservation of vessels.	Fleet supply.	Total.
Maintenance, Yards and Docks	\$9,096.52	\$1,051.74		\$10,148.26
Equipment of vessels	29,279.35	11,400.39	\$526.87	41,206.61
Increase navy, Equipment		727.79	22.46	750.25
Coal and transportation	42,149.07	1,243.14	27,267.53	70,659.74
Ordnance and ordnance stores	682.23	24,943.75	2,319.87	27,945.85
Increase navy, armor and armament		103.90		103.90
Construction and Repair	70,708.77	199,796.43	702.93	271,208.13
Increase navy, construction and machinery	13.34	10,003.27	1,515.89	11,532.50
Steam machinery	26,733.03	94,882.32	1,326.42	122,941.77
Provisions, navy			116,924.05	116,924.05
Contingent, Supplies and Accounts			590.43	590.43
Pay, miscellaneous	1.57			1.57
Total	178,663.88	344,152.73	151,196.45	674,012.06

STATEMENT B—Continued.

TABLE 16.—Expenditures at each yard on account of disability, leave, holidays, and incidental expenses at the several yards and stations, and miscellaneous public bills (Title V).

[For appropriations charged with these expenditures see Table 17.]

Navy-yards, etc.	Disability.	Leave.	Holiday.	Incidentals.	Total.
Portsmouth, N. H.	\$117.00	\$64,296.91		\$36,838.78	\$101,252.69
Boston, Mass.	71.68	114,229.08	\$28,165.54	48,276.96	190,733.26
Torpedo station, Newport, R. I.	44.00	13,286.60	7,203.21	2,165.17	22,698.98
Training station, Newport, R. I.		1,253.00	998.71	6.56	2,258.27
Naval War College		350.56	238.51		589.07
New London, Conn.		294.92	168.20		463.12
New York, N. Y.	448.90	162,837.60	159,942.67	71,285.32	394,514.49
Iona Island, N. Y.	627.99	4,932.44	2,458.32		8,018.75
Dover, N. J.		1,579.88	550.72		2,130.60
Philadelphia, Pa.	579.08	119,596.81	11,306.35	63,760.87	195,243.11
Naval magazine, Fort Mifflin, Pa.	252.24	3,503.32	2,616.24		6,371.80
Naval Observatory				739.87	739.87
Washington, D. C.	3,154.69	189,026.04	148,018.28	155,565.41	495,764.42
Naval proving ground, Maryland	1,698.68	6,410.36	5,726.89		13,835.93
Norfolk, Va.		93,430.27	82,280.67	53,333.08	229,044.02
Naval magazine, Norfolk, Va.		3,843.97	1,353.44		5,197.41
Charleston, S. C.	891.78	11,134.05	15,713.44	10,477.67	38,216.94
Pensacola, Fla.	1,208.32	7,867.51	5,662.20		14,738.03
Key West, Fla.	374.00	3,230.01	2,079.35		5,683.36
New Orleans, La.	344.41	3,752.86	3,341.72		7,438.99
Training station, Great Lakes	76.00	1,588.25	1,992.72		3,656.97
Las Animas, Colo.			1,356.97		1,356.97
Guantanamo, Cuba		864.77	2,180.27		3,045.04
San Juan, P. R.		1,097.10	186.89		1,283.99
Culebra, P. R.					
Training station, California		1,206.61	772.36		1,978.97
Mare Island, Cal.	446.40	106,594.85	55,768.26	11,280.44	174,098.95
Naval magazine, Mare Island		4,991.80	4,549.68		9,541.48
Puget Sound, Wash.	908.18	2,176.31	1,940.18	88,703.26	93,727.93
Naval magazine, Puget Sound	34.72	624.08	716.60		1,375.40
Hawaii, H. I.		160.56	836.76		997.32
Guam, L. I.		1,465.13	1,252.14	1,257.73	3,975.00
Cavite, P. I.		38,497.74	33,024.36	16,923.75	88,445.85
Olongapo, P. I.	828.65	8,182.46	8,803.20	5,470.59	23,284.90
Naval magazines, Philippine Islands		708.75	659.46	453.16	1,821.37
Ships and naval establishments in general (see bills in Statement B, Table 2)				2,651,111.48	2,651,111.48
Total	12,106.72	973,014.60	591,854.31	3,217,659.10	4,794,634.73

STATEMENT B—Continued.

TABLE 17.—Expenditures charged to each appropriation concerned for disability, leave, holidays, and incidental expenses (Title V).

[For yards charged with these expenditures see Table 16.]

Appropriations.	Disability.	Leave.	Holiday.	Incidentals.	Total.
Maintenance, Yards and Docks.....	\$854.46	\$95,040.51	\$40,928.02	\$107,677.64	\$244,500.63
Repairs and preservation.....		21.08	2,094.21	124.60	2,239.89
Contingent, Yards and Docks.....		1.74	644.83		646.57
Navy-yard, Portsmouth.....		9.35			9.35
Navy-yard, Washington.....			317.62		317.62
Naval station, Key West.....			394.08		394.08
Naval station, Guantanamo.....		22.48	19.03		19.03
Naval station, Olongapo.....		822.49	21.92		44.40
Naval station, Pearl Harbor.....			1,510.34	4,534.06	7,166.99
Plans and specifications, public works.....		4,337.19	181.00		181.00
Equipment of vessels.....	43.03	66,121.56	1,186.08		5,323.27
Coal and transportation.....	756.02	3,707.85	35,893.12	50,919.42	152,977.13
Ocean and lake surveys.....		308.01	4,399.02		8,872.89
Ordnance and ordnance stores.....	3,000.08	106,608.79	67,197.97	501.27	933.06
Experiments, Bureau of Ordnance.....		279.51	131.05	131,047.78	307,854.62
Repairs, Ordnance.....		67.84	129.97		410.66
Modernizing batteries, Massachusetts and Oregon, etc.....		5.68	11.36		197.81
New batteries, ships, navy.....	182.36	19,725.23	18,371.43	1,749.50	17.04
Fire control, ships, navy.....		149.88	81.96		40,028.52
Reserve torpedoes and appliances.....		5,094.77	2,704.63		231.84
Reserve ammunition.....		964.88	923.71		7,799.49
Reserve guns, ships, navy.....		828.56	698.57	5,692.09	1,888.89
Arming and equipping naval militia.....				836.05	7,219.22
Torpedo station.....	44.00	2,037.84	1,079.05		836.05
Ammunition, ships, navy.....	260.32	14,227.08	10,516.47		3,160.89
Naval magazine, New York Harbor.....			165.00		25,003.87
Naval magazine, Puget Sound.....	34.72	136.61	254.28		165.00
Construction and Repair.....	2,618.88	263,343.15	139,649.06	89,808.29	425.61
Construction plant, Boston.....				215.00	495,419.38
Steam machinery.....	754.72	183,018.85	94,898.55	83,321.70	215.00
Provisions, navy.....	1,815.22	40,069.65	23,179.31	1,168.82	361,993.82
Freight, Supplies and Accounts.....		62.53	55.20	1,069.09	66,233.00
Contingent, Supplies and Accounts.....				8.88	1,186.82
Medical Department.....			613.52		8.96
Repairs, Medicine and Surgery.....				49.92	613.52
Contingent, Medicine and Surgery.....		.53		193.58	49.92
Gunnery exercises.....		176.64	54.74	4,472.28	194.11
Recruiting, Navigation.....				925.11	4,703.66
Naval War College.....		112.52	103.04		925.11
Naval training station, Rhode Island.....		785.92	659.52		215.56
Naval training station, Rhode Island, buildings.....			3.36		1,445.44
Naval training station, Great Lakes.....	76.00	1,367.95	1,767.28		3.36
Naval training station, California.....		1,047.26	693.96		3,211.28
Pay, miscellaneous.....		1,861.79	882.84	2,296.24	1,741.22
Contingent, navy.....				99.83	5,040.87
Increase navy, Equipment.....		127.75	159.14	98.38	99.83
Increase navy, gun plant, Washington.....		1,680.68	966.57		355.37
Increase navy, armor and armament.....	1,666.91	91,836.71	78,381.40	42,338.44	2,647.25
Increase navy, construction and machinery.....		61,871.70	57,366.45	34,589.48	214,223.46
Increase navy, purchase steam colliers.....				20.08	153,827.63
Naval hospital fund.....		194.58	903.37	1,873.99	20.08
Naval supply fund.....		4,937.46	1,538.50	616.00	2,971.94
Naval establishments in general (Statement B, Table 2).....				2,651,111.48	7,091.96
Total.....	12,106.72	973,014.60	591,854.31	3,217,659.10	4,794,634.73

ending June 30, 1910.

		Title E— Real estate and chattels, industrial.	Title F—Mach- inery plant.	Title R— Real estate and chattels, military.	Total under Titles G, S, T, E, F, and R.	
Navy yards		Public bills, labor and material, from Table 5.	Public bills, labor and material, from Table 5.	Public bills, labor and material, from Table 10.		
1	Portsmouth, N. H.	\$91,795.84	\$52,211.11	\$17,131.44	\$621,120.57	1
2	Boston, Mass.	187,426.93	146,940.42	45,031.47	1,039,515.33	2
3	Torpedo station.	29,962.05	82,139.66		671,143.08	3
4	Training station, Newport	63,242.31	5,429.70		273,099.25	4
5	War College, Newport.				26,618.78	5
6	New London, Conn.				7,606.12	6
7	New York, N. Y.	\$59,987.61	175,612.69	89,511.67	2,520,198.90	7
8	Philadelphia, Pa.	375,756.55	132,428.11	171,700.13	1,366,965.74	8
9	Naval Home.	11,950.58			138,467.65	9
10	Naval Academy.	353,316.21	8,209.72		1,851,882.29	10
11	Washington, D. C.	296,945.61	130,257.33		1,090,276.67	11
12	Naval Observatory.	54,752.95	38,341.22		8,000.74	12
13	Naval proving ground.				240,068.61	13
14	Norfolk, Va.	293,809.65	251,240.00	184,767.57	1,619,880.46	14
15	Port Royal, S. C.				7,343.71	15
16	Charleston, S. C.	101,624.06	109,387.21	38,049.11	468,719.37	16
17	Key West, Fla.	137,438.75	1,786.53		278,193.83	17
18	Pensacola, Fla.	20,177.25	8,245.13		235,610.68	18
19	New Orleans, La.	53,283.53	19,413.19		190,453.17	19
20	Guantanamo, Cuba.	22,821.19	3,431.86		158,926.29	20
21	San Juan, P. R.	158.74			72,114.00	21
22	Culebra, P. R.				25,000.00	22
23	Mare Island, Cal.	582,064.01	189,246.29	109,348.10	1,739,354.68	23
24	Training station, California	23,557.27	412.00		131,299.51	24
25	Puget Sound, Wash.	473,206.01	38,792.14	17,663.61	1,621,834.02	25
26	Hawaii.	995,172.94			1,144,867.17	26
27	Tutuila.	3,087.62			94,477.48	27
28	Guam.	63,927.92	4,281.50		271,358.06	28
29	Cavite.	135,149.19	37,217.53		1,200,465.26	29
30	Olongapo.	135,065.53	16,712.48		531,352.17	30
31	Magazine, New England	165,936.28			106,971.02	31
32	Magazine, Dover, N. J.	22,155.07	5,874.20		72,682.31	32
33	Magazine, Iona Island.	18,893.07	4,689.15		140,245.14	33
34	Magazine, Fort Mifflin.	11,924.97	711.01		55,403.95	34
35	Magazine, Norfolk.	5,574.49	6,963.46		61,883.00	35
36	Magazine, Mare Island.	14,520.93	570.99		88,477.54	36
37	Magazine, Puget Sound.	31,576.57	8,046.17		51,147.87	37
38	Magazine, Philippine Islands	545.78			18,056.43	38
39	Frenchmans Bay.				7,955.39	39
40	Bradford, R. I.	17,285.84			58,427.85	40
41	Sitka, Alaska.	3,100.00			7,704.77	41
42	Yokohama, Japan.	5,490.66			64,907.95	42
43	San Diego, Cal.	5,397.10			18,423.45	43
44	Tiburon, Cal.	61,988.29			90,579.35	44
45	Pichilingue, Mexico.	409.53			4,796.50	45
46	Training station, Great	635,429.13	153.25		788,659.47	46
47	Las Animas, Colo.	83,496.62			448,141.97	47
48	Pay office Baltimore.				9,354.62	48
49	Sacketts Harbor.				2,168.89	49
50	Erie, Pa.				780.10	50
51	Cannaco, P. I.				28,778.73	51
52	Manila, P. I.				7,337.50	52
53	Wireless stations.	48,713.57			101,224.41	53
Total.		6,408,320.00	1,473,244.74	673,203.10	21,111,401.65	

70809°—NAVY

STATEMENT C.

Statement showing operation of the naval supply fund during fiscal year 1910.

CASH ACCOUNT.

DEBITS.

Balance July 1, 1909.....	\$518,764.61
Transfers adjusted to credit of fund account of fiscal year:	
1909.....	429,967.24
1910.....	12,309,138.91
Credits from other sources; material furnished other departments; deposits to credit of the fund; and auditor's adjustments.....	178,716.00
Total.....	13,436,586.76

CREDITS.

Public bills settled by auditor.....	9,296,946.35
Transfers adjusted to debit of fund account of fiscal year:	
1909.....	1,264,892.68
1910.....	2,431,130.39
Auditor's adjustments.....	41,637.62
Balance June 30, 1910.....	401,979.72
Total.....	13,436,586.76

ASSET AND LIABILITY ACCOUNT.

ASSETS.

Balance June 30, 1910.....	\$401,979.72
Stock on hand at shore stations and on ships, transferred to naval supply account.....	7,196,150.49
Stock on hand at shore stations held for adjustment of naval supply fund.....	2,459,889.83
Stock in transit between stations.....	148,213.39
Transfers to credit of the fund awaiting adjustment.....	480,976.95
Total.....	10,686,910.38

LIABILITIES.

Public bills paid awaiting adjustment.....	302,234.82
Labor paid awaiting adjustment.....	70,872.61
Transfers to debit of fund awaiting adjustment.....	20,774.58
Auditor's suspensions.....	38,505.99
Public bills due and unpaid June 30, 1910 (estimated).....	210,000.00
Labor due and unpaid June 30, 1910.....	158.50
Balance June 30, 1910.....	10,044,363.88
Total.....	10,686,910.38

STATEMENT D.

TABLE 1.—Statement showing the value of supplies (excepting provisions, clothing, and small stores) on hand July 1, 1909, the receipts from purchase and other sources, the expenditures during the year, and the balance on hand June 30, 1910.

	On hand July 1, 1909, with receipts and expenditures during fiscal year 1910.	Balance on hand June 30, 1910.
Balance on hand:		
Naval station, Portsmouth.....	\$1,038,315.97	\$1,981,249.97
Naval station, Boston.....	3,360,363.44	3,439,239.44
Torpedo station, Newport.....	1,406,709.99	1,305,283.85
Training station, Rhode Island.....	413.42	965.21
Naval station, New London.....	10,044.63	8,727.05
Naval station, New York.....	13,536,081.67	17,192,520.30
Naval station, Philadelphia.....	7,495,273.73	7,684,301.05
Naval Academy, Annapolis.....	55,708.52	76,084.34
Naval station, Washington.....	11,357,465.44	9,430,261.56
Naval Observatory, Washington.....	109,081.94	116,002.41
Naval proving ground, Indian Head.....	1,106,170.80	937,835.05
Naval station, Norfolk.....	7,881,580.38	9,431,029.80
Naval station, Charleston.....	228,288.66	297,301.64
Naval station, Port Royal.....	2,480.50	.....
Naval station, Key West.....	73,983.31	72,290.35
Naval station, Pensacola.....	258,333.80	229,129.06
Naval station, New Orleans.....	67,645.28	73,340.10
Training station, Great Lakes.....	8,681.85	13,716.35
Training station, California.....	1,088.14	1,480.80
Naval station, Mare Island.....	8,424,286.89	9,548,457.03
Naval station, Puget Sound.....	3,039,023.27	5,371,715.64
Naval station, Guantanamo, Cuba.....	119,277.91	94,298.09
Naval station, San Juan, P. R.....	41,331.80	35,150.77
Naval station, Culebra, P. R.....	62,444.00	72,811.73
Naval station, Cavite, P. I.....	3,700,252.61	3,825,023.97
Naval station, Olongapo, P. I.....	552,804.02	1,134,052.35
Naval station, Guam, L. I.....	87,768.86	100,402.41
Naval station, Hawaii.....	298,242.80	250,144.55
Naval station, Tutuila, Samoa.....	41,628.91	41,377.01
Coaling station, Frenchmans Bay, Me.....	28,616.56	31,039.60
Coaling station, Bradford, R. I.....	104,009.56	115,263.08
Coaling station, Pichilique Bay, Mexico.....	30,666.09	25,812.22
Coaling station, Sitka, Alaska.....	100,190.96	89,118.76
Coaling station, Yokohama, Japan.....	11,652.90	32,396.97
Coaling station, Port Isabel, P. I.....	1,048.36	.....
Collars.....	79,905.80	130,495.65
Supply vessels.....	330,572.02	524,176.93
Shipments between stations in transit.....	1,297,861.02	920,413.85
Total on hand, July 1, 1909.....	66,429,325.80	.....
Received during the fiscal year 1910 under Title X:		
From open purchase.....	\$3,388,116.12	.....
From contracts.....	18,910,316.74	.....
From manufacture, Title Z.....	20,050,058.26	.....
From gain by inventory.....	2,308,181.35	.....
From transfers from ships.....	14,805,707.29	.....
	59,462,379.76	.....
Expended during the fiscal year 1910:		
For use.....	\$24,510,127.72	.....
To Title V, sold to other departments.....	406,048.26	.....
To Title W, condemned.....	821,647.78	.....
To Title W, revalued.....	2,470,072.38	.....
To titles B and Y, transfers to ships.....	23,051,185.31	.....
	51,259,081.45	.....
Total.....	74,632,624.11	74,632,624.11

• Includes material furnished with new vessels by the contractors.

STATEMENT D—Continued.
 TABLE 2.—Statement of the value of stores, by classes, at the several navy-yards and stations June 30, 1910.

Classification.	Portsmouth.	Boston.	Torpedo station.	New York.	Philadelphia.	Naval Observatory and Washington.	Proving ground.	Norfolk.	Charleston.	Marine Island.
1. Guns, mounts, range finders, etc. (main and secondary batteries).	\$555,725.85	\$557,086.28	\$324.37	\$2,132,915.81	\$1,983,294.46	\$6,821,454.14	\$1,645.60	\$954,649.74	\$1,142.86	\$1,457,170.01
2. Arms and ordnance equipment and supplies.	55,969.98	64,393.82	204.08	1,042,040.45	333,214.00	312,034.70	7,393.00	399,744.99	472.60	477,750.23
3. Torpedoes, tubes, mines, and accessories.	41,963.73	118,068.56	1,170,302.11	325,886.21	87,090.03	47,585.93	.....	76,182.11	10,582.92	192,852.94
4. Ammunition.	18,080.85	109,735.49	46,240.08	10,049,896.28	3,433,363.70	231,440.98	651,428.70	5,402,778.35	2,124.36	4,418,268.11
5. Flags and bunting.	4,518.07	9,182.58	100.96	56,920.99	5,332.58	2,097.45	160.04	2,102.32	2,372.94	27,633.15
6. Anchors, chains, and other ground tackle.	34,131.46	485,141.52	65.84	118,359.22	163,392.45	7,106.51	.....	39,130.34	6,064.76	283,559.62
7. Coal, steaming, for ships' use.	21,991.94	10,378.27	383.45	20,925.49	5,484.58	439.75	.....	138,142.56	5,023.42	171,463.54
8. Fuel, liquid, and fuel for shore purposes.	5,054.70	6,239.13	333.16	.....	1,947.53	.....	24,806.23	.....	7,537.96	23,901.15
9. Boats (not to include outfits).	81,186.20	101,343.59	.....	161,991.13	68,153.12	11,945.74	.....	61,358.43	10,764.29	66,565.09
10. Boat engines, motors, and boilers.	170,452.14	74,606.05	33.57	107,099.67	27,657.19	20.00	304.17	48,294.21	2,680.00	82,372.23
11. Pumps, except air pumps and pumps pertaining to main engines.	6,866.70	17,962.50	12.00	27,430.21	9,826.39	96.46	.....	22,722.80	444.63	8,544.98
12. Ship and boat fittings and accessories not otherwise classified.	79,969.36	104,106.33	2,399.60	163,583.41	103,830.33	8,837.40	943.44	26,373.87	12,138.17	115,002.33
13. Engine and fire room fittings and supplies.	5,534.09	6,695.77	250.96	12,888.63	8,405.28	2,810.46	1,652.44	86,227.24	2,441.61	15,214.01
14. Oils, greases, and lubricants.	2,193.28	334.18	481.57	18,078.70	3,376.51	3,562.35	969.25	8,762.46	4,248.14	6,841.29
15. Insulated electrical wire and cable.	13,007.66	15,958.65	1,165.66	141,513.85	36,539.58	671.12	1,016.03	4,605.78	4,159.90	101,105.18
16. Wire-communication apparatus and supplies.	1,637.70	4,110.41	4.64	13,050.23	6,391.97	10,081.31	.....	49,027.86	1,840.36	32,669.85
17. Electrical material other than wire and wireless apparatus.	85,799.49	131,877.63	5,890.66	321,139.67	148,183.10	15,738.72	6,448.88	54,098.66	24,439.43	186,303.90
18. Instruments of precision, supplies, etc.	8,196.40	35,067.36	327.55	24,423.48	11,315.57	118,990.34	634.55	73,569.66	6,602.97	83,391.67
19. Blocks, sheaves, books, and pins.	28,176.70	26,550.70	113.18	52,906.65	27,715.10	268.92	73.20	4,854.94	4,738.05	39,049.53
20. Raising, standing and running.	8,043.69	7,181.79	36.27	11,722.56	14,336.11	33.76	.....	26,605.86	2,864.30	12,406.45
21. Cordage and twine.	9,908.45	10,497.26	1,673.16	25,009.55	26,709.62	9,140.73	636.40	4,916.53	10,651.70	50,449.73
22. Wire rope and bare wire.	5,884.65	45,288.83	592.92	14,043.20	12,722.54	3,427.17	1,736.33	30,869.70	2,087.52	24,023.52
23. Hemp, raw.	.....	49,700.86	.....	52.69	.....	6.72	.....	12,216.70	.....	59.67
24. Canvas and duck.	17,811.59	52,222.50	311.92	90,253.99	31,039.44	1,986.38	313.53	521.74	3,037.43	36,374.70
25. Canvas and duck articles.	29,914.42	37,590.55	593.70	62,917.43	32,727.78	33.20	76.28	60,796.97	8,600.12	60,222.09
26. Furniture, ship and house.	10,652.19	16,595.75	.....	40,431.10	48,020.57	3,026.05	10.00	13,567.58	5,967.28	23,140.73

STATEMENT D—Continued.

TABLE 2.—Statement of the value of stores, by classes, at the several navy-yards and stations June 30, 1910—Continued.

Classification.	Portsmouth.	Boston.	Torpedo station.	New York.	Philadel- phia.	Naval Ob- servatory and Wash- ington.	Proving ground.	Norfolk.	Chares- ton.	Maro Island.
27. Textiles, except canvas, duck and bunting.	\$2,003.85	\$1,423.67	\$9.35	\$49,203.75	\$1,960.52	\$2,000.00	\$155.79	\$3,508.42	\$582.39	\$18,652.96
28. Textiles, made up, except can- vas, duck, and bunting.	1,860.08	3,166.95	10.40	16,867.57	3,638.35	3,592.65	871.93	4,955.09	1,839.49	9,201.70
29. Mattresses, pillows, cushions, hair, tufting, foildings, etc.	4,134.31	3,708.78	19.52	10,402.41	6,246.03	102.54	30.34	2,201.16	1,539.14	5,579.00
30. Bath room and toilet fixtures.	5,304.17	4,910.39	6.96	5,693.67	3,758.64	991.39	458.14	3,383.27	2,373.50	11,455.00
31. Lighting apparatus, running and signal lights (nonelectric)	3,728.44	2,350.32	98.56	7,568.93	3,092.09	535.27	13.82	8,260.20	2,226.80	12,307.36
32. Pipe and boiler coverings.	4,381.78	7,526.67	672.07	4,646.00	3,912.97	909.79	1,179.42	4,065.68	1,248.06	4,649.70
33. Packing, gaskets, and rubber.	12,525.01	16,960.96	3,632.35	32,678.76	27,750.12	10,720.55	1,781.60	5,817.37	8,193.26	50,790.11
34. Leather and belting, hose and hose fittings.	11,331.39	19,748.11	248.70	37,449.12	19,776.58	6,959.25	2,479.18	28,229.53	5,640.18	39,307.75
35. Books, charts, drawings, music, periodicals, etc.	152.81	430.63	81.60	63,009.70	505.02	1,494.68	381.71	15,469.78	497.59	5,908.11
36. Musical instruments.	106.93	84.11			17,484.18	82.37		316.76	215.25	1,747.89
37. Athletic goods, baseball and foot- ball outfits, etc.	564.15	1,207.24	22.27	2,313.31	28.06	158.37		3,130.91	263.90	787.02
38. Brooms and brushes.	1,378.06	3,705.95	344.25	11,688.95	5,474.23	4,024.38	398.72	8,450.47	1,803.71	14,671.99
39. Lumber and timber.	71,670.15	176,986.23	1,138.33	176,616.25	112,941.59	58,770.62	9,240.15	12,725.01	12,836.24	149,630.81
40. Machines and power-driven tools.	5,643.31	18,362.53	980.30	125,906.91	32,414.96	33,417.68	33,075.68	200,983.85	4,239.34	18,372.21
41. Hand tools.	19,981.74	30,437.05	570.15	39,258.11	1,880.14	1,880.14	1,782.79	36,350.55	12,853.99	45,726.37
42. Hardware.	13,655.08	26,153.78	1,965.50	46,301.93	26,573.63	15,958.91	2,346.08	18,892.04	11,815.55	48,092.21
43. Bolts, nuts, rivets, screws, and washers.	13,880.33	25,328.67	837.38	47,750.71	15,381.20	8,331.46	1,769.69	28,199.22	6,753.35	34,808.23
44. Pipe and tubing.	70,429.30	116,671.23	4,673.14	257,562.25	88,704.26	34,579.97	3,925.88	42,085.26	13,927.24	205,884.06
45. Pipe fittings, valves, gauges, flanges, etc.	31,348.76	35,921.04	2,755.82	120,222.16	33,423.55	11,302.78	7,776.74	147,881.23	17,344.38	33,413.51
46. Metals in bars, bolts, rods, bil- lets, and ingots.	91,852.56	201,586.46	26,754.33	292,665.65	145,192.64	270,530.25	2,179.38	51,427.76	3,141.04	132,034.43
47. Metals in sheets, borings, filings, and scrap.	22,068.02	10,084.58	14,633.97	59,607.23	42,948.54	344,756.66	4,942.04	130,011.06	10,785.36	69,299.97
48. Plates and shapes.	75,567.39	86,033.69	639.40	137,629.06	31,894.17	1,015,962.13	50,297.75	45,288.83	6,556.32	99,170.67
49. Rough castings, forgings, blooms.	3,126.76	4,314.98	9,460.54	1,917.86	1,225.96		2,846.13			14,622.91
50. Foundry supplies and special foundry tools.	3,708.58	5,498.37	284.87	5,280.66	1,622.09	16,353.15	6.00	8,948.56	140.87	8,818.40
51. A. Miscellaneous, mops, disin- fectants, etc.	3,208.37	246,692.53	600.64	3,515.51	4,937.28	2,135.25	57,322.08	7,180.06	1,953.80	7,368.23

52. Paints, paint oils, turpentine, varnishes, tar, rosin, alcohol.....										9,742.38	6,200.52	56,302.69
53. Stationery.....	13,824.07	30,351.62	1,840.15	87,335.11	26,025.29	162.19	4,819.05	9,742.38	6,200.52	40,734.18	1,444.42	18,806.76
54. Office equipment (other than furniture and stationery).....	2,028.01	6,990.46	166.22	16,662.04	5,019.23	5,963.19	211.66	40,734.18	1,444.42			
55. Clothing and small stores.....	2,298.79	2,045.60	73.16	6,167.25	1,988.34	1,225.58	100.00	6,918.00	2,919.53	6,918.00	2,919.53	6,930.23
56. Provisions and groceries.....	56.09			290.14	501.45	9.08	2,462.31	976.66	222.93	3,435.74	9.66	1,172.38
57. Drugs and surgeon's necessities.....				59.84	169.53	2.38	65.00	104.08	4.12			228.74
58. Vehicles, live stock, harness, provender, farm, garden appliances.....	204.77	187.97	59.42	2,916.43	84.31	4,196.32	510.20	200.58	1,933.97	3,759.57	2,631.32	1,712.19
59. Building material, etc.....	1,777.86	5,457.20	167.69	8,910.88	4,225.53	888.42	6,385.18	3,759.57	2,631.32			8,075.84
60. Boilers and engines and spare parts.....	171,478.57	103,831.59	85.40	343,785.69	147,138.38	1,195.10	21,576.63	386,610.75	6,306.05			90,089.47
61. All other ship power-driven appliances.....	1,092.12	1,217.90	45.00	34,844.76	2,082.23	2,179.02	92.40	12,387.82	113.57			14,286.72
62. Officers' mess gear, china, glass, and furniture.....	4,279.91	6,968.80	334.41	58,354.62	10,308.49	128.78		2,687.49	2,098.94			27,154.86
63. Crew's mess gear.....	1,006.71	2,789.76	19.00	12,912.45	2,331.61	34.46		3,573.94	68.76			9,951.21
64. Barges, stores, barge ovens, barge laundry machinery, etc.....	7,407.13	13,967.22	117.83	44,933.93	23,624.38	166.83	89.07	7,002.85	1,419.84			40,114.10
65. Miscellaneous.....	4,293.32	10,689.47	98.61	53,249.56	162,376.81	3,003.48	16,222.43	447,596.58	79.37			235,774.10
Total.....	1,981,246.97	3,439,239.45	1,305,383.85	17,192,520.30	7,684,301.03	9,546,264.39	637,835.06	9,431,026.80	297,301.64			9,548,457.03
Stores in transit.....												
Grand total.....												

STATEMENT D—Continued.

TABLE 2.—Statement of the value of stores, by classes, at the several navy-yards and stations June 30, 1910—Continued.

Classification.	Puget Sound.	Cavite.	Key West, Pensacola, New Orleans.	Guantanamo, San Juan, Culebra.	Guam, Hawaii, Tutuila.	Naval Academy, training station Newport, training station Great Lakes, training station California.	Olongapo.	New London, Frenchmans Bay, Bradford, Pictou Bay, Sitka, Yokohama, others.	Supply vessels.	Total.
1. Guns, mounts, range finders, etc. (main and secondary batteries).	\$1,846,504.53	\$579,235.77	\$6,564.40	\$31,569.42	\$41,451.99	\$1,745.21	\$100,100.00	.....	\$2,656.30	\$16,875,080.74
2. Arms and ordnance equipment and supplies.	207,701.11	197,829.11	8,682.27	5,772.96	3,964.80	380.41	89,400.00	.....	435.45	3,198,384.05
3. Torpedoes, tubes, mines, and accessories.	17,258.78	38,311.74	515.19	6,680.48	.....	11,439.47	.....	.....	2,122.59	2,147,121.79
4. Ammunition.	607,317.99	792,563.00	5,949.40	29,518.59	22,004.65	46.94	629,500.00	.....	215.15	28,442,062.53
5. Flags and bunting.	25,328.69	23,324.28	1,366.79	562.72	441.36	.....	.....	.....	2,158.22	163,602.54
6. Anchors, chains, and other ground tackle.	146,306.91	94,447.69	17,951.02	2,449.39	3,339.69	.....	15,300.00	.....	264.68	1,421,071.01
7. Coal, steaming, for ships' use.	268,741.47	657,919.46	40,198.61	49,852.25	290,698.10	3,873.63	37,000.00	\$411,540.02	.....	2,094,776.54
8. Fuel, liquid, and fuel for shore purposes.	3,673.17	4,046.51	1,646.08	1,237.82	14.88	1,095.91	.....	.....	650.93	106,824.71
9. Boats (not to include outfits).	88,088.07	13,967.02	10,449.16	943.33	.....	60.00	.....	.....	678,755.17	678,755.17
10. Boat engines, motors, and boilers.	121,566.72	39,678.14	5,181.04	3,278.80	1,030.27	302.06	.....	.....	642.98	685,646.34
11. Pumps, except air pumps and pumps pertaining to main engines.	7,310.81	19,631.69	421.41	201.58	40.44	9.00	.....	.....	2,286.58	124,052.58
12. Ship and boat fittings and accessories not otherwise classified.	113,188.89	70,697.23	17,920.65	6,173.71	2,385.80	1,669.86	.....	.....	15,306.14	843,829.58
13. Engine and fire room fittings and supplies.	27,135.64	12,011.77	1,126.63	963.67	736.38	232.75	.....	.....	23,185.92	267,832.75
14. Oils, greases, and lubricants.	4,138.55	16,361.46	1,939.46	3,442.50	461.27	189.78	.....	.....	18,530.91	93,691.32
15. Insulated electrical wire and cable.	38,377.02	29,670.59	2,705.70	64.23	81.07	1,865.35	15,600.00	.....	10,695.94	418,768.91
16. Wireless-communication apparatus and supplies.	14,640.01	9,753.01	434.25	742.99	1,663.64	8.63	.....	.....	84.01	146,140.87
17. Electrical material other than instruments of precision, ship-bells, etc.	262,502.31	90,182.37	25,229.62	1,424.03	1,373.62	6,860.77	10,300.00	.....	60,434.61	1,378,228.27
18. Instruments of precision, ship-bells, etc.	32,016.63	1,060.25	1,060.25	283.81	318.64	110.19	.....	.....	753.36	.....
19. Pipes, steam, boiler, and fire.	33,480.95	34,097.00	6,866.20	160.64	649.53	132.70	.....	.....	692.18	431,518.03
20. Railing, standing and running.	29,874.44	27,375.09	2,477.75	206.36	104.32	.....	.....	.....	607.67	184,797.37
21. Cordage and twine.	26,928.60	10,935.91	6,738.11	1,868.49	1,111.67	2,241.40	.....	.....	18,018.60	324,047.78

22. Wire rope and bare wire.....	17,451.40	2,326.47	414.37	1,097.13	116.87	3,311.43	183,899.85
23. Hemp, raw.....	1.74	14.00					62,052.37
24. Canvas and duck.....	36,381.49	2,300.29	1,461.71	607.93	150.30	5,794.57	320,381.53
25. Canvas and duck articles.....	13,175.95	17,672.95	378.19	556.54	509.10	19,144.39	441,291.90
26. Furniture, ship and house.....	5,206.42	1,044.80	255.49	232.90	111.96	383.20	221,369.90
27. Textiles, except canvas, duck, and bunting.....	13,086.08	544.14	51.19	17.30	405.36	840.06	96,764.31
28. Textiles, made up, except can- vas, duck, and bunting.....	2,870.21	225.51	99.31	127.55	93.90	2,586.87	60,642.73
29. Mattresses, pillows, cushions, hair, tufting, findings, etc.....	10,017.31	793.14	12.26	7.14	446.33	779.51	68,537.72
30. Bath room and toilet fixtures.....	8,851.17	68.40	34.10	31.03	2,508.19	410.30	58,727.73
31. Lighting apparatus, running and signal lights (nonelectric).....	11,468.05	793.82	418.10	496.97	59.02	1,383.24	72,571.16
32. Pipe and boiler coverings.....	8,990.29	892.27	90.34	383.06	73.10	44,752.75	44,752.75
33. Packing, gaskets, and rubber.....	47,816.26	3,633.07	1,245.40	1,245.40	4,057.80	10,400.00	356,283.40
34. Leather and belting, horse and hose fittings.....	18,099.41	4,046.71	1,444.27	660.84	1,957.39	2,585.94	237,857.62
35. Books, charts, drawings, music, periodicals, etc.....	3,833.33	1,671.97	158.28	15.00	66.22	11.48	93,780.95
36. Musical instruments.....	1,064.40	34.60	9.90	80.00	161.22	34.50	21,362.16
37. Athletic goods, baseball and foot- ball outfits, etc.....	1,764.64	167.11		42.48	2.00	147.60	11,973.40
38. Brooms and brushes.....	7,066.84	2,203.10	2,094.45	393.18	425.83	4,354.39	77,467.15
39. Lumber and timber.....	99,100.75	23,290.05	4,154.37	4,407.46	911.04	3,827.91	1,034,068.50
40. Machines and power-driven tools.....	21,227.94	11,973.93	1,327.19	1,963.54	18.70	2,486.67	511,006.43
41. Hand tools.....	47,607.89	4,521.52	1,984.04	1,866.11	1,132.82	2,730.87	325,504.96
42. Hardware.....	41,091.53	53,338.80	4,601.63	2,911.39	4,333.02	9,248.39	357,266.90
43. Bolts, nuts, rivets, screws, and washers.....	29,046.55	54,374.07	2,389.66	1,892.60	2,428.97	11,571.07	292,749.36
44. Pipe and tubing.....	151,158.83	274,442.34	2,075.54	14,068.98	8,338.03	35,731.93	1,366,361.88
45. Pipe fittings, valves, gauges, flanges, etc.....	40,929.96	87,163.21	2,129.88	8,217.27	17,407.57	24,013.43	657,660.19
46. Metals in bars, bolts, rods, bil- lets and ingots.....	100,668.90	78,657.97	1,859.91	5,925.91	408.93	11,371.19	1,374,744.85
47. Metals in sheets, borings, filings, and saw chips.....	71,884.54	38,572.41	5,180.46	3,163.05	921.04	10,684.69	865,004.13
48. Plates and shapes.....	101,862.60	32,098.19	1.00	285.65	632.67	1,684.76	768,187.73
49. Rough castings, forgings blooms and castings.....	5,169.85	2,465.13	1,939.53	468.29	10.31	1,024.25	1,149,376.00
50. Foundry supplies and special foundry tools.....	6,136.04	8,083.73	224.76	190.81	19.44	3,199.35	87,097.62
51. Acids, chemicals, soaps, disin- fectants, etc.....	5,710.70	5,011.42	1,128.77	542.21	1,203.23	8,394.10	358,513.92
52. Paints, paint oils, turpentine, varnishes, tar, resin, alcohol.....	25,197.04	78,934.65	6,532.19	3,505.77	3,084.62	40,006.11	433,369.69
53. Stationery.....	9,444.39	10,979.59	633.05	496.65	2,162.94	4,630.48	130,560.68
54. Office equipment (other than furniture and stationery).....	6,792.86	2,603.50	46.45	412.23	389.98	573.52	42,326.01
55. Clothing and small stores.....	266.96	725.94	48	2.47	110.34	205.29	6,971.49
56. Provisions and groceries.....	5.13	116.02	11.63	7.38	2.40	26.80	4,017.76
57. Drugs and surgeon's necessities.....	5.83	2.40	11.63	7.38		14.44	1,038.12

STATEMENT D—Continued.

TABLE 2.—Statement of the value of stores, by classes, at the several navy-yards and stations June 30, 1910—Continued.

Classification.	Puget Sound.	Cavite.	Key West, Pensacola, New Orleans.	Guantanamo, San Juan, Culebra.	Guam, Hawaii, Tutuila.	Naval Academy, training station Newport, Lakes, training station California.	Olongapo.	New London, Frenchmans Bay, Bradford, Pichilingue Bay, Sitka, Yokohama colliers.	Supply vessels.	Total.
58. Vehicles, live stock, harness, provender, farm, garden appliances.....	\$734.02	\$81.64	\$27.92	\$576.72	\$976.04	\$551.44			8.59	\$14,965.53
59. Building material, etc.....	4,744.54	5,347.80	1,177.05	1,263.67	567.15	2,433.03			1,003.99	59,016.72
60. Boilers and engines and spare parts.....	157,011.32	134,522.76	1,237.27	3,915.03	605.62	49.75			5,248.65	1,574,776.63
61. All other ship power-driven appliances.....	19,631.14	5,214.08	86.67	4.00					105.00	93,382.43
62. Officers' mess gear, china, glass, and silverware.....	22,490.86	15,177.80	185.54	15.63	931.89	208.38			406.17	151,582.57
63. Crews' mess gear.....	14,416.31	4,846.96	129.40	146.03	163.81				514.00	52,906.01
64. Baking stoves, bake ovens, kettles, laundry machinery, etc.....	26,746.50	11,005.04	64.57	617.68	401.19	1,433.69			681.47	178,943.32
65. Miscellaneous.....	121,262.03	3,184.41	2,219.08	2,805.55	43.51	359.16			79,633.97	1,257,411.00
Total.....	5,370,715.64	3,825,023.97	374,759.52	262,260.69	391,923.98	91,940.80	1,134,052.58	432,873.90	524,176.93	73,712,210.43
Stores in transit.....										920,413.68
Grand total.....										74,632,624.11

STATEMENT E.

Statement of the value of supplies received and expended on board ships in commission, excepting medical and pay officers' stores, for the fiscal year ending June 30, 1910.

Bureau.	Balance on hand July 1, 1909.	Receipts.	Total on hand and received.	Expended for use and condemned.	Expended by transfer.	Total expenditures.	Balance on hand June 30, 1910.
Equipment.....	\$8,977,593.61	\$3,410,525.21	\$12,388,118.82	\$866,175.63	\$2,037,017.73	\$2,905,193.36	\$9,482,925.46
Ordnance.....	33,737,597.12	13,950,615.97	57,788,613.09	2,075,384.80	11,136,918.33	13,212,303.13	44,576,309.96
Construction and repair.....	4,748,226.67	1,874,610.66	6,622,840.33	677,463.42	1,120,624.46	1,798,087.88	4,824,752.45
Steam engineering.....	3,243,652.42	5,565,355.48	8,749,007.90	4,268,310.15	1,062,486.63	5,330,796.78	3,418,208.12
Total.....	60,767,472.82	24,741,107.32	85,508,580.14	7,889,336.00	15,357,050.15	23,246,386.15	62,262,193.99
Balance on hand July 1, 1909.....	\$60,767,472.82						
Received during fiscal year 1910.....	24,741,107.32						
Expended, cost of commission (use and condemned).....	7,889,336.00						
Expended by transfer to yards, ships, etc.....	15,357,050.15						
	<u>\$85,508,580.14</u>						
	23,246,386.15						
Balance on hand June 30, 1910.....	<u>62,262,193.99</u>						
Value of stock in transit from yards and stations to ships.....	2,465,554.19						
Value of stores on board ships and in transit June 30, 1910.....	<u>64,727,748.18</u>						

STATEMENT F.

Statement showing cost of maintaining ships in com-

		Accrued pay, officers of the Navy.	Accrued pay, enlisted men of the Navy.	Accrued pay, offi- cers and men of the Ma- rine Corps.	Com- muta- tions.	Pilotage, cablegrams, and inci- dental expenses.	Value of stores ex- pended.
							Equip- ment.
BATTLE SHIPS, FIRST CLASS.							
1	Alabama.....	\$1,702.04	\$6,160.14		\$10.80	\$307.68	\$343.02
2	Connecticut.....	144,642.09	363,902.78	\$23,514.31	2,193.60	13,950.52	23,020.70
3	Delaware.....	21,147.44	50,358.26	4,435.04		1,711.60	934.21
4	Georgia.....	100,871.33	334,188.80	18,467.58	1,688.90	8,888.87	8,857.55
5	Idaho.....	84,224.66	289,893.79	16,995.01	1,551.00	8,007.64	10,712.64
6	Illinois.....	2,585.01	5,299.88		10.50	309.57	538.92
7	Indiana.....	37,706.95	114,871.72	1,417.82	661.20	5,004.07	2,139.87
8	Iowa.....	7,965.00	28,163.20	1,676.97	120.90	1,029.19	1,138.01
9	Kansas.....	81,889.40	333,455.63	18,452.07	1,867.20	9,057.24	13,623.81
10	Kearsarge.....	4,633.21	13,272.30		78.60	659.45	1,854.10
11	Kentucky.....	1,933.50	6,427.88		11.10	539.03	2,422.13
12	Louisiana.....	83,777.66	343,030.11	18,183.34	1,749.90	8,746.34	18,831.01
13	Maine.....	12,145.36	42,505.87	2,467.59	279.00	1,493.17	5,079.72
14	Massachusetts.....	6,476.69	28,388.05	1,547.64	133.50	411.85	1,264.60
15	Michigan.....	46,191.77	151,338.22	7,936.91	970.20	4,090.37	5,302.71
16	Minnesota.....	101,783.12	360,239.62	19,071.14	1,734.00	8,549.26	11,165.25
17	Mississippi.....	86,797.70	290,367.19	17,149.12	1,683.00	7,916.67	10,857.48
18	Missouri.....	75,704.43	263,496.64	15,219.29	1,506.30	7,339.51	12,005.37
19	Nebraska.....	82,556.40	326,158.39	17,532.34	1,683.30	7,940.05	15,118.78
20	New Hampshire.....	91,936.13	349,293.99	18,657.44	1,856.70	8,114.96	11,858.47
21	New Jersey.....	82,708.34	281,727.08	16,485.74	1,703.10	8,304.86	13,636.71
22	North Dakota.....	20,104.25	44,171.43	3,919.43	263.40	604.12	1,456.72
23	Ohio.....	36,692.69	129,940.45	6,391.87	779.10	2,822.84	15,939.78
24	Rhode Island.....	88,776.88	323,566.62	17,594.32	1,632.60	7,452.61	26,623.83
25	South Carolina.....	27,824.94	98,687.04	4,920.15	295.80	3,846.47	4,213.46
26	Vermont.....	84,343.96	331,732.71	18,562.07	1,850.10	8,711.74	12,192.89
27	Virginia.....	96,000.65	324,180.89	18,236.18	1,785.00	8,402.59	21,005.72
28	Wisconsin.....	72,578.45	227,398.40	14,839.50	1,548.30	7,575.72	14,391.70
		1,585,600.05	5,462,217.08	303,672.87	29,988.80	151,787.90	266,529.25
BATTLE SHIP, SECOND CLASS.							
29	Texas.....	17,402.31	69,916.13	5,526.95	102.00	4,083.92	1,982.93
ARMORED CRUISERS.							
30	California.....	94,590.09	317,282.81	17,260.08	1,734.00	8,601.67	16,410.08
31	Colorado.....	78,957.58	303,659.33	11,459.46	1,864.20	7,579.65	13,048.91
32	Maryland.....	80,819.31	298,745.19	15,448.60	1,739.40	8,038.43	15,707.19
33	Montana.....	81,690.88	347,445.95	15,637.85	1,770.60	9,819.65	10,266.89
34	North Carolina.....	85,744.45	338,196.84	17,683.28	1,732.20	8,380.53	11,491.81
35	Pennsylvania.....	80,467.28	301,110.73	14,689.26	1,741.50	8,270.10	19,267.14
36	South Dakota.....	77,258.25	311,151.25	15,289.17	1,788.00	8,145.30	11,252.33
37	Tennessee.....	108,718.67	341,812.87	19,984.73	2,037.60	10,820.35	9,903.65
38	Washington.....	82,014.47	326,512.85	15,655.23	1,893.30	9,049.04	11,206.70
39	West Virginia.....	95,018.24	306,876.03	16,377.35	1,825.20	8,961.78	9,753.25
		865,279.22	3,192,893.85	159,485.07	15,126.00	87,666.60	188,807.36
CRUISERS, FIRST CLASS.							
40	Charleston.....	79,629.92	258,866.01	13,371.85	1,146.30	11,671.02	13,479.64
41	Milwaukee.....	20,639.25	64,729.23		378.60	2,665.09	5,188.25
42	New York.....	67,908.94	161,284.19	7,719.51	1,621.70	11,407.98	8,142.89
43	St. Louis.....	28,364.30	126,571.03		501.00	3,319.48	5,212.56
		196,542.41	611,460.48	21,091.36	3,647.60	29,063.67	32,083.34
CRUISERS, SECOND CLASS.							
44	Chicago.....	27,093.46	38,218.30		2,713.80	1,423.78	2,865.79
45	Newark.....	19,050.39	76,108.69	16,310.64		2,971.59	4,748.15
46	Olympia.....	32,507.11	45,790.23		3,346.80	1,840.76	3,021.13
		78,650.96	160,117.15	16,510.64	6,353.40	6,236.13	10,635.07

STATEMENT F.

mission during fiscal year ending June 30, 1910.

Ordnance.	Value of stores expended—Continued.				Total expenditures under Title C, cost of commission.	Cost of repairs to hull, machinery, and equipage.	Total cost of maintenance of ships.	No. of months in commission.	
	Construction and repair.	Steam engineering.	Supplies and accounts.	Medicine and surgery.					
\$5.35	\$55.38	\$2,618.05			\$11,202.46	\$56,824.31	\$68,026.77	1	1
160,709.96	11,672.39	55,868.64	\$103,807.67	\$855.41	904,038.07	197,843.82	1,101,881.89	12	2
253.71	673.37	5,355.33	12,761.73	3,010.19	100,922.58	3,650.26	104,572.84	3	3
81,348.80	10,807.14	38,998.96	91,124.38	963.47	696,205.78	141,213.10	837,418.88	12	4
86,457.29	9,063.88	27,642.05	81,580.04	829.10	616,957.10	91,284.43	708,241.53	12	5
980.33	278.80	209.43	1,040.46		11,261.90	105,937.27	117,199.17	1	6
322.06	2,360.74	10,955.59	31,726.09	1,619.94	208,786.65	172,718.44	381,505.09	12	7
136.47	766.10	8,041.37	9,127.91		58,165.12	251,166.00	309,331.12	2	8
96,643.96	14,468.08	47,625.50	98,266.95	1,098.92	716,448.70	121,968.04	838,416.80	12	9
68.94	1,091.64	7,980.64	2,436.69		32,075.57	39,820.81	71,896.38	2	10
556.43	1,552.16	20,661.16	2,169.15		36,272.54	66,501.97	102,774.51	2	11
74,991.96	11,308.47	50,842.71	101,222.38	1,503.57	714,187.45	205,339.54	920,026.99	12	12
2,328.02	4,006.73	44,962.54	12,751.03		128,019.03	139,631.88	267,650.91	2	13
379.14	1,038.72	4,262.55	10,202.53	179.51	64,284.87	43,077.48	97,362.35	2	14
57,087.10	5,038.96	24,132.86	38,158.24	3,311.67	343,559.01	9,761.62	353,320.63	6	15
77,226.01	12,916.90	44,990.83	98,459.53	868.28	737,004.94	143,103.92	880,108.86	12	16
98,058.91	9,069.69	36,092.00	80,019.04	1,020.50	639,031.30	102,489.63	741,520.93	12	17
48,982.41	15,954.01	41,780.04	76,564.68	620.24	559,252.92	168,298.80	727,551.72	12	18
90,994.96	12,119.52	44,341.39	77,583.65	805.44	676,834.22	187,851.03	864,685.25	12	19
87,312.67	12,282.51	44,964.03	99,088.84	745.85	726,111.59	157,175.95	883,287.54	12	20
77,148.43	17,187.25	45,499.93	81,995.29	833.07	633,229.80	32,394.57	665,624.37	12	21
819.52	886.52	2,772.78	11,891.22	2,634.99	89,524.38	6,034.82	95,550.20	3	22
34,925.76	18,668.89	17,768.09	34,728.82	280.09	298,938.38	35,100.98	334,039.36	6	23
83,216.07	18,116.19	43,597.51	91,693.91	984.41	703,254.95	172,168.26	875,423.21	12	24
671.32	3,207.76	15,174.41	28,442.95	2,999.07	190,283.37	5,483.45	195,766.82	4	25
95,346.00	14,190.22	39,637.02	94,907.64	554.35	702,028.70	209,897.11	911,925.81	12	26
69,553.35	11,758.09	32,011.40	92,168.64	959.46	676,061.97	178,494.20	854,556.17	12	27
64,928.36	11,630.96	29,266.27	68,928.64	368.97	513,455.27	11,467.02	524,922.29	12	28
1,391,488.29	252,171.07	794,058.08	1,532,848.70	27,047.50	11,777,378.68	3,067,268.71	14,834,637.39		
199.04	2,702.82	6,767.08	20,535.64	300.15	129,518.97	14,707.61	144,226.58	12	29
39,102.50	12,295.50	156,404.47	92,880.59	1,076.35	757,638.14	140,562.18	898,200.32	12	30
34,572.29	8,609.98	176,175.79	91,967.91	599.95	728,495.05	149,424.52	877,919.57	12	31
18,539.07	12,263.39	161,329.53	89,633.91	515.95	702,780.03	172,645.28	875,425.31	12	32
41,724.88	7,969.07	71,258.73	107,700.16	984.20	696,268.86	54,064.92	750,333.78	12	33
32,652.57	13,153.98	68,094.58	108,123.27	433.24	685,687.05	57,067.45	742,754.50	12	34
35,972.61	15,634.85	155,340.05	88,392.55	1,146.31	722,032.38	177,217.00	899,249.38	12	35
20,098.49	13,391.65	100,495.55	96,456.24	674.06	716,000.29	88,866.38	804,866.67	12	36
25,034.62	8,956.59	159,531.56	103,094.04	1,151.98	790,976.66	170,394.10	961,370.76	12	37
33,461.00	11,523.80	134,044.27	102,213.80	700.79	728,275.85	164,594.31	892,870.16	12	38
30,023.80	8,084.27	168,315.60	91,226.88	1,194.55	737,656.96	221,341.03	958,997.99	12	39
311,189.75	111,883.08	1,410,990.15	871,689.55	8,477.38	7,265,811.27	1,596,177.17	8,861,988.44		
18,159.52	9,477.04	86,865.07	85,374.41	1,466.79	579,507.57	15,456.22	594,963.79	12	40
3,245.72	7,093.19	29,671.47	13,470.31	216.17	147,297.28	14,313.98	161,611.26	10	41
21,087.17	6,764.67	50,165.26	43,438.87	401.52	379,942.70	37,794.51	417,737.21	12	42
4,623.26	5,325.60	85,634.98	34,774.39	474.37	294,801.08	39,046.55	333,847.63	10	43
47,116.67	28,690.59	262,336.78	177,057.98	2,568.85	1,401,548.63	106,611.26	1,508,159.89		
859.78	2,234.19	11,184.42	9,522.91	47.55	96,163.98	37,385.72	133,549.70	12	44
257.18	2,534.92	7,805.85	17,553.45	311.42	147,944.99	235.92	148,180.91	12	45
306.24	2,765.44	8,497.92	9,566.37		107,642.00	12.00	107,654.00	12	46
1,423.20	7,534.55	27,488.19	36,642.73	358.97	551,750.97	37,633.64	589,384.61		

STATEMENT F—Continued.

Statement showing cost of maintaining ships in com-

	Accrued pay, officers of the Navy.	Accrued pay, enlisted men of the Navy.	Accrued pay, officers and men of the Marine Corps.	Committed rations.	Pilotage, cablegrams, and incidental expenses.	Value of stores expended.	
						Equip-ment.	
CRUISERS, THIRD CLASS.							
47	Albany.....	\$47,829.60	\$131,603.82		\$893.10	\$4,081.47	\$5,755.69
48	Atlanta.....					185.70	799.94
49	Chattanooga.....	40,554.02	149,523.80	\$3,004.93	651.00	4,613.94	7,982.01
50	Cleveland.....	37,517.77	129,792.29		587.70	4,380.17	5,713.67
51	Denver.....	28,877.61	90,391.32		379.30	2,617.34	4,803.99
52	Des Moines.....	30,523.96	112,329.74	185.10	609.90	5,310.18	14,456.30
53	Galveston.....	27,869.42	89,235.19	14.40	473.40	3,010.92	4,285.34
54	Montgomery.....	37,850.24	65,740.43		251.40	4,043.30	3,486.41
55	New Orleans.....	29,767.23	86,933.15		852.00	2,806.24	2,947.83
56	Tacoma.....	39,514.43	116,329.04		647.50	4,282.53	7,231.91
		596,284.99	972,078.78	4,104.43	5,873.80	35,833.79	57,484.77
SCOUT CRUISERS.							
57	Birmingham.....	45,517.64	157,637.15		580.80	6,232.69	4,247.31
58	Chester.....	43,396.62	161,195.08		800.10	5,272.44	8,306.61
59	Salern.....	43,209.58	155,593.13		550.20	5,679.47	3,817.40
		132,124.84	474,425.36		1,931.10	17,184.60	16,371.32
TORPEDO-BOAT DESTROYERS.							
60	Bainbridge.....	4,169.56	26,813.80		18.30	436.61	1,497.20
61	Barry.....	5,263.53	28,227.77			1,012.23	1,002.73
62	Chauncey.....	4,478.98	28,713.82		29.40	540.46	883.71
63	Dale.....	4,850.96	27,655.35		60.30	336.30	1,525.48
64	Flusser.....	6,441.46	28,569.23		42.60	2,185.96	1,400.61
65	Hopkins.....	6,890.23	34,165.35		63.00	3,001.54	654.86
66	Hull.....	8,965.15	36,898.08		134.84	2,873.01	1,413.35
67	Lamson.....	3,977.92	18,375.77		66.00	938.01	654.17
68	Lawrence.....	6,972.02	36,911.99		55.20	5,790.88	1,442.66
69	Macdonough.....	7,629.85	27,629.09		189.00	3,060.69	340.53
70	Paul Jones.....	6,704.77	35,897.87		24.00	3,177.13	1,449.32
71	Perry.....	7,294.76	36,375.83			3,340.79	900.66
72	Pretble.....	5,838.77	30,393.98		109.50	1,749.77	662.25
73	Preston.....	5,052.79	21,751.45		42.60	1,645.46	933.29
74	Reid.....	4,916.15	23,694.78		105.60	1,633.96	1,368.67
75	Smith.....	7,459.68	25,014.39		108.00	1,440.10	1,158.83
76	Stewart.....	4,440.51	26,106.77		49.80	848.77	1,090.57
77	Truxtun.....	6,779.81	35,481.09		36.00	3,787.42	986.48
78	Whipple.....	7,938.39	36,759.92		24.60	3,472.79	1,157.86
79	Worden.....	4,014.56	14,523.03		43.50	1,962.73	457.13
		120,011.85	590,129.09		1,806.00	43,264.68	20,977.34
MONITORS.							
80	Cheyenne.....	11,285.39	18,645.48		186.90	932.67	938.24
81	Monterey.....	23,897.89	97,686.04		458.40	2,869.81	4,079.88
82	Ozark.....	7,395.33	17,320.00		82.20	650.25	1,052.82
83	Tonopah.....	16,044.76	23,903.60		1,406.40	893.97	1,915.77
84	Monadnock.....						3,091.84
		58,523.37	157,555.12		2,133.90	6,376.60	11,071.69
TORPEDO BOATS.							
85	Bailey.....	1,967.64	5,820.48				1.77
86	Bailey.....	288.09	1,835.49		9.00	478.55	335.92
87	Biddeford.....	1,892.98	7,138.75		86.10	145.83	217.15
88	Blakely.....	1,340.52	6,035.32		33.30	321.44	303.22
89	Davis.....	1,255.01	8,831.73			1,420.32	73.22
90	De Long.....	537.02	3,742.32			109.80	333.36
91	Dupont.....	2,461.08	12,953.14		100.50	624.89	74.36
92	Farragut.....	3,840.42	15,264.99			1,263.24	170.62
93	Goldsborough.....	4,021.37	25,695.76			4,444.66	398.60
94	Porter.....	3,888.33	6,352.86		4.50	197.45	367.82
95	Rodgers.....		104.82				165.99

STATEMENT F—Continued.

mission during fiscal year ending June 30, 1910—Continued.

Value of stores expended—Continued.					Total expenditures under Title C, cost of commission.	Cost of repairs to hull, machinery, and equipment.	Total cost of maintenance of ships.	No. of months in commission.
Ordnance.	Construction and repairs.	Steam engineering.	Supplies and accounts.	Medicine and surgery.				
\$7,972.09	\$4,288.83	\$45,302.82	\$32,793.08	\$451.85	\$280,940.04	\$40,672.70	\$321,612.74	12 47
.....	364.50	2,485.81	.....	311.85	4,146.90	8,072.09	12,218.99	12 48
27,970.57	5,374.41	58,930.22	29,501.52	648.06	319,657.98	8,594.18	328,251.26	12 49
9,040.14	5,338.70	38,169.05	32,477.85	470.57	263,487.97	5,799.28	269,287.25	12 50
5,123.30	4,451.01	31,803.06	24,979.82	263.82	193,930.46	6,806.16	200,736.62	9 51
5,893.90	4,389.07	22,622.37	33,300.54	445.07	236,126.66	86,620.73	322,747.39	12 52
4,633.01	4,792.24	27,067.36	26,139.53	251.90	188,372.41	9,564.18	197,936.59	9 53
10,417.09	3,365.24	14,113.47	13,607.02	481.61	153,356.14	24,108.94	177,465.08	12 54
419.10	2,839.48	19,763.76	21,903.53	879.30	169,105.22	53,904.85	223,010.07	8 55
485.79	3,884.52	20,358.99	33,213.11	368.84	226,215.75	32,027.26	258,243.01	12 56
71,954.90	39,088.06	391,246.99	257,916.40	4,572.87	2,035,358.63	276,226.87	2,311,576.00	
5,907.24	5,319.05	37,139.38	34,997.75	776.79	298,356.40	75,368.06	373,725.06	12 57
3,307.56	4,752.18	41,087.98	37,582.25	549.44	306,850.14	31,500.97	338,351.11	12 58
4,392.06	4,190.93	29,280.39	35,773.74	657.16	283,144.06	67,881.31	350,525.37	12 59
15,606.80	14,062.76	108,107.75	108,353.72	1,933.59	888,550.00	174,250.94	1,062,801.54	
7,972.54	1,388.90	13,626.36	3,535.49	.....	59,458.76	18,115.78	77,574.54	12 60
3,908.07	1,056.01	14,009.97	2,502.80	.....	57,103.11	17,335.74	74,438.85	12 61
3,759.91	1,305.01	17,409.59	3,658.70	.....	60,839.58	15,837.12	76,676.70	12 62
3,579.85	1,320.72	11,922.49	4,207.72	.....	55,459.17	17,877.67	73,336.84	12 63
3,617.53	1,670.39	17,463.89	5,383.86	.....	69,705.34	1,321.06	71,026.40	9 64
6,687.69	727.94	23,640.69	6,267.10	.....	78,014.31	9,477.31	87,491.62	12 65
5,118.87	1,656.27	23,525.34	8,041.88	.....	89,168.75	11,443.95	100,612.70	12 66
789.37	502.23	13,171.64	3,745.70	.....	42,220.51	753.74	42,974.55	6 67
8,057.62	432.74	9,337.80	8,679.24	.....	77,680.06	14,084.03	91,764.09	12 68
1,355.55	612.82	4,751.76	5,148.67	.....	50,757.67	10,466.30	61,223.97	12 69
3,207.46	1,270.08	22,103.91	8,216.77	.....	81,997.31	26,033.66	108,030.97	12 70
3,459.41	1,398.04	29,306.86	8,208.66	.....	90,508.92	7,309.52	97,808.44	12 71
10,701.86	339.83	15,947.34	7,392.94	.....	73,157.34	10,952.69	84,110.03	12 72
1,841.97	737.07	9,635.02	4,851.96	.....	46,546.57	4,823.14	47,369.71	9 73
7,114.12	1,074.02	17,365.78	5,517.12	.....	62,810.29	2,252.49	65,062.69	9 74
28,267.98	575.21	10,237.53	4,827.76	.....	79,088.01	1,090.74	80,178.75	9 75
3,466.71	1,304.76	13,701.92	6,366.82	.....	57,382.63	71,006.68	128,389.31	12 76
3,561.18	906.33	29,498.14	8,798.15	.....	89,835.30	10,488.24	100,323.54	12 77
3,695.04	1,423.35	27,927.12	8,585.90	.....	90,984.67	7,080.64	98,065.31	12 78
1,819.13	296.88	5,330.50	2,962.99	.....	31,410.45	5,173.62	36,584.37	12 79
111,941.89	80,044.60	329,003.47	117,560.23	.....	1,344,128.95	250,035.49	1,604,164.38	
1,681.67	886.65	6,318.85	3,397.87	968.45	45,242.07	4,179.82	60,401.80	6 80
14,767.26	4,739.93	16,070.72	23,122.15	793.40	188,512.59	14,920.42	203,433.01	12 81
251.10	668.26	3,272.01	3,984.43	.....	34,586.40	3,720.72	38,307.12	9 82
394.45	2,398.88	8,471.30	5,884.06	.....	61,283.19	14,853.22	76,136.41	9 83
750.00	548.74	4,704.61	.....	.....	9,095.19	55,065.68	64,160.87	..... 84
17,844.48	9,212.49	53,837.49	56,588.51	1,761.91	338,719.44	103,229.86	442,019.30	
184.20	123.42	417.00	410.60	.....	8,925.06	551.76	9,476.82	9 85
2,560.13	193.99	2,862.46	.....	.....	8,622.88	45,957.39	54,580.27	3 86
365.99	156.73	1,940.76	1,263.08	.....	13,207.37	6,021.15	19,228.52	12 87
451.37	241.72	1,973.55	1,180.88	.....	11,889.32	3,008.71	14,898.03	6 88
19.61	127.74	1,884.78	2,061.61	.....	15,675.94	15,679.42	31,355.36	12 89
5.29	76.35	699.15	603.46	.....	6,076.75	34,207.62	40,284.37	12 90
331.08	388.71	3,021.45	1,866.89	.....	21,821.07	2,802.92	24,623.99	12 91
10.47	304.48	3,010.62	2,039.09	.....	25,963.63	32,258.04	58,161.67	12 92
1,655.95	429.79	13,174.82	6,437.32	.....	56,258.27	10,068.18	66,326.45	12 93
593.03	131.41	1,923.46	1,244.30	.....	14,673.16	10,047.55	24,720.71	12 94
19.03	109.11	180.52	.....	.....	639.40	26,975.63	27,615.03	..... 95

STATEMENT F—Continued.

Statement showing cost of maintaining ships in com-

	Accrued pay, officers of the Navy.	Accrued pay, enlisted men of the Navy.	Accrued pay, offi- cers and men of the Marine Corps.	Com- puted ratios.	Pilotage, cablegrams, and inci- dental expenses.	Value of stores ex- pended. Equip- ment.
TORPEDO BOATS—contd.						
96	Rowan.....	\$2,930.72	\$14,332.32		\$797.66	\$166.33
97	Shubrick.....	2,782.79	12,872.11	\$7.50	333.48	207.33
98	Stockton.....	2,929.96	7,514.48	100.50	155.63	183.39
99	Stringham.....	2,405.56	20,719.29	37.20	1,758.79	976.93
100	Thornton.....	3,650.68	8,879.18	58.80	1,420.81	294.33
101	Tingey.....	1,902.74	8,121.51		1,648.76	60.33
102	Wilkes.....	2,765.55	9,445.62		978.75	112.33
103	Reserve Torpedo Flotilla.....	13,926.04	127,023.42	463.80	8,561.50	2,072.63
		54,788.50	502,745.61	801.30	24,661.45	6,518.13
SUBMARINE TORPEDO BOATS.						
104	Adder.....	1,192.46	4,806.80		81.30	2,330.08
105	Bonita.....	1,305.70	5,895.20		92.75	328.70
106	Cuttlefish.....	3,226.27	7,134.03	13.30	363.75	2,875.52
107	Grampus.....	3,647.71	8,237.28	50.70	741.60	1,359.22
108	Grayling.....	1,661.04	6,833.02		18.75	275.57
109	Moccasin.....	1,111.43	5,151.79		82.86	2,206.83
110	Narwhal.....	1,749.84	5,592.44		58.00	1,432.62
111	Octopus.....	3,952.22	11,398.38	24.60	418.28	562.33
112	Pike.....	3,647.73	8,237.29	51.00	741.60	700.30
113	Plunger.....	2,585.29	4,810.75			1,778.70
114	Porpoise.....	2,245.44	9,692.37	51.30	113.40	2,263.11
115	Shark.....	3,070.09	23,075.07		579.03	1,713.79
116	Snapper.....	1,160.93	3,835.75		70.50	1,182.00
117	Stingray.....	1,282.86	5,318.94		52.00	727.57
118	Tarantula.....	2,275.95	7,073.10		183.48	511.68
119	Tarpon.....	1,137.40	4,186.95		54.26	698.42
120	Viper.....	1,461.74	6,771.28		324.50	1,471.73
		39,705.70	128,080.44	185.30	3,976.00	28,704.30
WOODEN CRUISERS.						
121	Alliance.....	6,156.77	49,765.11	258.00	1,348.25	1,868.40
122	Hartford.....	25,168.73	27,982.48	2,616.00	4,565.90	4,100.85
123	Mohican.....	13,760.21	73,055.70	156.00	1,448.65	4,001.95
		45,085.71	160,803.58	3,031.50	7,362.80	9,971.20
124	Ships, Naval Academy.....				638.30	7,335.27
GUNBOATS.						
125	Annapolis.....	10,360.21	40,788.80	100.50	1,977.15	3,484.33
126	Arayat.....	4,947.38	12,807.32		1,169.62	397.00
127	Callao.....	4,053.13	16,540.22	16.80	2,022.00	660.04
128	Castine.....	17,114.52	53,281.80	293.40	1,294.92	4,280.48
129	Concord.....	5,199.99	17,986.33	\$216.21	38.40	1,970.57
130	Dolphin.....	22,332.04	69,919.93	45.90	5,350.24	4,033.20
131	Dubuque.....	20,680.79	71,413.64	250.80	3,175.54	2,920.29
132	Helena.....	25,693.14	83,535.00	8,413.43	8,214.68	3,044.99
133	Marietta.....	24,042.13	65,468.79	124.50	1,666.87	4,339.06
134	Mindoro.....	5,151.57	12,593.62		886.11	1,103.70
135	Paducah.....	22,154.85	60,216.20	370.50	2,407.77	1,880.65
136	Paragua.....	4,488.02	13,284.10	59.40	1,429.01	623.85
137	Peoria.....	4,536.11	31,862.33	219.30	2,752.62	1,184.77
138	Petrel.....	2,065.10	8,823.80	54.90	1,765.47	
139	Princeton.....	14,161.81	42,608.28		2,219.81	1,480.38
140	Samar.....	4,136.96	13,369.04		1,482.19	300.90
141	Vicksburg.....	21,809.04	62,571.60	172.50	2,371.75	2,261.79
142	Villalobos.....	8,106.97	25,277.72		1,933.49	594.60
143	Wheeling.....	3,417.77	11,264.47	36.00	205.21	755.33
144	Wilmington.....	22,242.68	81,977.87	8,040.86	6,079.48	2,951.35
145	Wolverine.....	14,067.52	61,643.71		4,889.97	1,782.74
146	Yorktown.....	25,221.02	74,637.34	436.90	1,622.22	2,830.13
		258,782.69	940,815.15	80,304.65	2,557.80	65,921.69

STATEMENT F—Continued.

mission during fiscal year ending June 30, 1910—Continued.

Value of stores expended—Continued.					Total expenditures under Title C, cost of commission.	Cost of repairs to hull, machinery, and equipment.	Total cost of maintenance of ships.	No. of months in commission.
Ordnance.	Construction and repairs.	Steam engineering.	Supplies and accounts.	Medicine and surgery.				
\$1,447.76	\$135.01	\$6,462.25	\$5,172.96	.....	\$31,445.01	\$23,374.61	\$54,819.62	12 96
1,039.10	766.75	2,689.78	2,268.11	.....	22,967.45	3,390.87	26,358.32	12 97
401.10	235.07	1,959.88	1,303.49	.....	14,783.61	1,671.95	16,455.56	12 98
1,158.20	262.11	5,822.45	4,209.65	.....	37,350.20	15,496.12	52,846.32	12 99
296.58	89.84	2,638.90	1,564.34	.....	18,893.68	4,339.64	23,233.32	12 100
322.39	111.88	2,265.18	1,693.25	.....	16,126.04	4,365.35	20,491.39	9 101
523.16	143.52	2,517.32	1,608.92	.....	18,095.08	3,999.20	22,094.28	9 102
1,965.42	4,394.01	13,802.04	34,405.78	\$3,453.85	210,067.77	.....	210,067.77	..... 103
13,549.86	8,481.65	69,246.76	69,538.60	3,453.85	583,481.69	244,306.11	797,787.80	
22.11	26.21	864.13	.....	.....	9,313.09	6,938.98	16,252.07	6 104
13.32	294.62	2,157.78	.....	.....	10,058.13	1,940.10	11,998.23	6 105
46.50	183.49	1,905.14	334.00	.....	15,287.00	6,091.58	21,378.58	12 106
69.75	247.41	1,234.79	.....	.....	15,758.56	8,480.54	24,239.10	12 107
99.50	305.97	2,956.71	.....	.....	12,152.22	2,719.77	14,871.99	6 108
13.15	50.77	937.82	.....	.....	9,554.63	6,695.33	16,249.96	6 109
199.54	492.85	1,673.48	.....	.....	11,159.77	2,130.03	13,289.80	6 110
84.52	16.14	2,445.32	48.00	.....	18,949.82	7,951.83	26,901.65	12 111
22.16	442.33	1,946.69	.....	.....	15,789.00	8,271.93	24,060.93	12 112
5.32	153.72	1,192.73	.....	.....	10,521.51	6,779.11	17,300.62	12 113
27.53	140.43	960.65	4,830.17	.....	20,324.40	3,879.58	24,203.98	12 114
727.51	109.57	964.74	4,830.16	.....	35,009.96	4,620.81	39,630.77	12 115
170.37	235.46	1,672.03	.....	.....	8,327.04	1,945.73	10,272.77	6 116
169.54	321.80	1,264.50	.....	.....	9,137.21	2,033.45	11,170.66	6 117
491.45	36.20	722.70	297.22	.....	11,591.78	9,364.54	20,956.32	12 118
169.55	296.76	1,239.86	.....	.....	7,783.20	1,954.09	9,737.29	6 119
6.39	195.63	836.16	290.81	.....	11,358.24	7,246.64	18,604.88	12 120
2,308.27	5,549.36	24,675.23	10,630.36	.....	232,165.56	89,014.04	321,179.60	
91.86	2,496.89	3,718.65	12,230.84	301.34	78,226.76	.....	78,226.76	12 121
538.11	1,994.53	4,882.38	7,244.46	.....	79,124.32	8,690.04	87,820.36	12 122
2,887.73	2,187.15	4,902.62	39,174.97	408.94	141,983.64	7,331.46	149,315.10	12 123
3,517.70	6,668.67	13,503.65	58,650.27	710.28	299,334.72	16,027.50	315,362.22	
.....	6,430.37	11,705.99	.....	.....	26,109.93	.....	26,109.93	..... 124
481.68	2,433.97	11,491.98	17,176.24	346.39	88,641.31	103.83	88,745.14	12 125
1,144.07	128.35	924.28	4,871.82	40.52	26,430.36	1,123.67	27,554.03	12 126
2,545.38	655.10	1,569.71	5,747.30	121.02	33,961.70	2,330.78	36,292.48	12 127
666.05	2,937.56	7,257.84	22,149.92	575.67	112,352.26	13,631.16	125,983.42	12 128
2,392.43	1,086.48	8,754.14	4,562.72	.....	43,191.74	61.71	43,253.45	5 129
1,534.10	3,563.39	10,483.71	16,024.09	437.66	137,439.69	54,685.11	192,124.80	12 130
4,981.30	2,709.38	12,240.66	18,899.98	274.73	137,547.10	19,498.88	157,046.98	12 131
2,499.12	2,713.07	22,517.63	19,634.02	884.09	177,324.66	2,093.31	179,417.97	12 132
2,538.34	4,770.94	18,015.95	19,165.53	390.11	140,502.22	40,561.74	181,063.96	12 133
861.72	790.45	1,155.56	6,271.03	203.00	29,047.38	2,229.22	31,276.60	12 134
4,901.37	5,081.48	12,317.75	18,946.83	530.31	137,906.18	13,166.33	151,072.51	12 135
256.77	512.65	1,230.37	5,886.51	81.95	27,651.39	2,553.71	30,205.10	12 136
12.04	671.71	3,295.03	4,509.41	.....	49,043.22	659.65	49,702.87	12 137
4.46	.....	23.38	2,327.42	1,200.04	16,864.57	5,771.11	22,635.68	3 138
657.30	1,276.01	12,363.38	10,446.40	366.19	85,579.71	7,804.48	93,384.19	6 139
3,624.33	582.39	1,528.31	2,891.45	94.68	28,010.19	1,041.15	29,051.34	12 140
812.81	1,845.60	16,426.27	15,748.92	195.24	123,805.54	14,462.55	138,268.09	12 141
3,331.55	151.86	2,780.29	6,507.95	344.24	49,058.11	451.18	49,509.29	12 142
135.33	657.23	2,565.88	3,027.18	1,215.20	23,279.60	17,577.57	40,857.17	3 143
4,990.14	2,315.70	27,792.14	24,627.77	801.81	182,001.18	4,035.93	186,037.11	12 144
234.85	3,096.08	3,062.80	9,333.76	345.05	98,366.45	3,367.93	101,734.41	12 145
876.93	1,864.42	25,747.76	18,835.27	651.98	152,736.01	11,566.28	164,302.29	12 146
39,432.07	39,778.89	203,544.82	257,592.12	9,159.88	1,900,740.60	218,767.25	2,119,507.85	

STATEMENT F—Continued.

Statement showing cost of maintaining ships in com-

		Accrued pay, officers of the Navy.	Accrued pay, enlisted men of the Navy.	Accrued pay, officers and men of the Marine Corps.	Com- muted rations.	Pilotage, cablegrams, and inci- dental expenses.	Value of stores ex- pended. Equip- ment.
TRANSPORTS.							
147	Buffalo.....	\$37,788.93	\$87,463.10	\$308.11	\$668.10	\$4,294.83	\$15,402.45
148	Dixie.....	26,809.82	95,174.83	.....	413.70	6,198.14	8,182.87
149	Panther.....	30,943.91	92,877.60	.....	190.20	3,790.86	8,336.17
150	Pratree.....	33,327.35	83,816.19	.....	381.90	7,121.49	3,206.20
		128,960.01	359,331.72	305.11	1,653.90	21,405.32	32,927.59
SUPPLY SHIPS.							
151	Arethusa.....	4,291.74	11,616.81	.....	30.30	22,810.75	1,628.69
152	Celtic.....	32,965.27	65,713.04	4.98	224.70	2,594.94	6,941.96
153	Culgoa.....	20,598.17	60,898.96	.....	177.00	3,616.21	3,683.70
154	Glacier.....	25,775.36	58,905.73	.....	234.00	3,715.80	6,108.36
155	Iris.....	16,726.57	43,393.92	.....	207.60	8,431.48	2,676.33
156	Rainbow.....	15,167.94	59,458.72	.....	377.70	2,260.78	5,713.17
157	Supply.....	21,943.54	58,461.40	1,412.00	325.50	5,198.18	4,912.70
		137,098.59	358,448.58	1,416.05	1,576.80	48,630.14	27,873.85
HOSPITAL SHIPS.							
158	Relief.....	12,246.38	25,501.89	.....	34.20	2,185.84	664.67
159	Solace.....	13,826.12	12,486.47	.....	64.20	33,085.37	2,112.65
		26,072.50	37,988.36	.....	98.40	35,270.71	2,767.32
SAILING SHIP.							
160	Severn.....	20,224.19	147,674.01	9,643.81	670.20	7,476.62	1,262.57
CONVERTED YACHTS.							
161	Eagle.....	12,061.09	28,867.45	.....	171.00	802.50	2,136.69
162	Hist.....	16,842.55	28,463.63	.....	256.80	4,806.71	3,192.35
163	Mayflower.....	23,702.26	78,615.44	2,567.50	.....	5,164.37	3,362.40
164	Scorpion.....	13,309.86	45,125.21	.....	.....	2,682.49	1,892.19
165	Sylph.....	.....	17,002.89	.....	.....	530.78	570.35
166	Yankton.....	16,929.52	43,071.17	.....	156.60	825.58	2,489.31
		69,856.28	241,145.79	2,567.50	584.40	14,812.45	12,883.09
NAVAL AUXILIARIES.							
167	Abarenda.....	.....	.....	.....	.....	12,360.69	1,700.38
168	Ajax.....	.....	.....	.....	.....	8,823.83	240.23
169	Alexander.....	.....	.....	.....	.....	24,195.61	2,360.52
170	Brutus.....	.....	.....	.....	.....	33,747.29	794.75
171	Caesar.....	.....	.....	.....	.....	42,973.92	541.80
172	Hannibal.....	.....	.....	.....	.....	33,392.51	734.85
173	Hector.....	.....	.....	.....	.....	31,960.62	3,960.21
174	Justin.....	.....	.....	.....	.....	27,637.11	1,314.87
175	Lebanon.....	.....	.....	.....	.....	8,908.47	1,594.84
176	Leonidas.....	.....	.....	.....	.....	27,117.09	1,017.63
177	Marcellus.....	.....	.....	.....	.....	29,568.41	322.69
178	Mars.....	.....	.....	.....	.....	39,174.90	4,844.79
179	Naushan.....	.....	.....	.....	.....	28,783.11	2,900.89
180	Nero.....	.....	.....	.....	.....	6,837.73	.....
181	Pompey.....	.....	.....	.....	.....	24,314.44	2,594.67
182	Saturn.....	.....	.....	.....	.....	29,914.51	683.19
183	Sterling.....	.....	.....	.....	.....	25,144.65	4,570.35
184	Vestal.....	.....	.....	.....	.....	39,820.43	4,413.41
185	Vulcan.....	.....	.....	.....	.....	35,965.69	2,537.67
186	Prometheus.....	.....	.....	.....	.....	21,423.52	.....
						659,064.35	86,618.69

• Includes pay and subsistence of civilian officers and crew.

STATEMENT F—Continued.

nition during fiscal year ending June 30, 1910—Continued.

Ordnance.	Value of stores expended—Continued.				Total expenditures under Title C, cost of commission.	Cost of repairs to hull, machinery, and equipage.	Total cost of maintenance of ships.	No. of months in commission.
	Construction and repair.	Steam engineering.	Supplies and accounts.	Medicine and surgery.				
\$609.11	\$7,437.17	\$65,776.60	\$22,919.79	\$987.12	\$243,650.34	\$31,713.20	\$275,363.54	12 147
1,330.12	7,118.30	20,350.37	25,364.62	487.77	191,529.54	19,243.31	210,772.85	12 148
49.71	8,417.79	30,491.50	17,449.48	383.41	190,131.23	9,636.62	199,767.85	12 149
15,395.52	3,075.27	25,441.15	22,597.00	390.44	194,746.54	34,225.69	228,972.23	12 150
17,384.46	26,048.63	142,068.62	88,530.89	2,248.74	820,057.65	94,518.82	914,576.47	
	1,784.69	6,947.13	2,429.20		51,539.25	23,141.60	84,680.85	12 151
369.54	2,928.50	11,582.82	14,371.26	409.23	137,235.34	25,462.39	162,697.64	12 152
2.38	2,774.02	11,021.98	10,961.63	290.20	114,029.35	20,814.52	134,843.87	12 153
2,025.14	1,956.66	42,653.27	13,563.70	496.03	165,433.85	53,349.81	218,783.66	12 154
	4,099.93	22,559.57	9,546.21		107,644.61	10,259.69	117,904.30	12 155
1,619.84	3,669.70	24,154.72	13,368.28	584.92	124,408.38	71,866.42	196,274.80	12 156
197.66	4,275.25	31,686.59	15,808.19	13.99	142,935.00	7,861.16	150,796.16	12 157
4,244.66	21,518.75	150,695.18	89,045.47	1,794.38	833,226.73	222,785.60	1,056,011.28	
	1,422.87	13,157.30	13,757.06	1,579.40	70,538.91	5,919.87	76,458.78	12 158
198.75	3,304.37	9,474.17	1,677.95	2,186.28	78,417.11	128,027.88	206,444.99	7 159
198.75	4,727.24	22,631.47	15,435.01	3,765.68	148,966.08	153,947.75	232,913.77	
429.88	437.68	452.49	19,507.33		207,758.78	4,125.58	211,884.36	12 160
124.52	1,039.42	4,825.43	8,485.58	81.52	58,615.00	13,044.47	71,659.47	12 161
	1,144.66	2,706.30	8,342.15	189.56	65,945.11	12,950.72	78,895.83	12 162
1,103.13	2,810.26	12,031.05	17,149.39	161.89	146,507.69	20,963.40	176,471.09	12 163
257.20	2,108.59	13,824.12	10,946.57		90,044.23	14,953.01	104,997.24	12 164
	549.32	694.08	3,839.31		23,096.73	4,976.80	28,073.53	12 165
7,213.45	1,377.57	4,579.03	31,046.51	568.39	108,117.13	16,129.56	124,246.69	12 166
8,608.59	9,026.82	58,470.01	79,809.51	941.86	492,325.89	91,957.99	584,283.88	
	1,667.29	5,991.56		47.55	21,767.44	67,988.21	89,755.65	4 167
	620.78	2,741.51			12,429.34	69,949.82	82,379.16	4 168
	1,121.87	13,525.27			41,205.27	4,520.80	45,726.07	9 169
	1,062.54	8,862.81			42,497.43	17,794.29	60,291.72	12 170
	2,148.34	11,046.43			56,680.52	15,949.33	72,629.85	12 171
	1,313.27	6,487.04		47.24	41,974.51	12,949.79	54,924.30	12 172
71.40	3,976.21	18,857.98		71.20	58,899.72	5,728.85	64,628.57	9 173
	1,129.51	11,389.66			41,471.15	11,869.52	53,340.67	12 174
	1,014.39	4,709.69		269.89	17,026.89	4,156.57	21,183.46	4 175
	884.23	3,970.80		50.95	33,640.70	5,818.48	39,459.18	12 176
	2,911.25	6,343.70		28.43	39,183.88	14,486.64	53,670.52	12 177
	3,553.02	15,558.61		92.65	63,223.97	5,354.21	68,578.18	10 178
	1,519.31	19,360.21			52,563.52	10,192.83	62,756.35	12 179
	1.20	5.40			6,844.33	58,796.64	65,640.97	6 180
8.84	1,578.71	9,081.23			37,617.89	7,325.31	45,943.20	12 181
	504.86	20,420.44			51,538.66	10,297.64	61,836.14	12 182
	963.50	3,745.22			30,501.65	1,733.55	32,235.20	10 183
86.90	4,270.70	20,678.02		81.65	69,808.05	15,998.35	85,806.40	9 184
	2,956.04	13,299.15		50.15	56,677.44	1,230.02	57,907.46	9 185
93.80	3,403.34	19,834.03		52.94	47,345.30	733.43	48,078.73	6 186
290.94	37,260.42	215,000.50		792.86	822,897.50	342,664.92	1,165,562.42	

STATEMENT F—Continued.

Statement showing cost of maintaining ships in com-

		Accrued pay, officers of the Navy.	Accrued pay, enlisted men of the Navy.	Accrued pay, offi- cers and men of the Marine Corps.	Com- puted rat- ions.	Pilotage, cablegrams, and inci- dental expenses.	Value of stores ex- pended.
							Equip- ment.
TUGS.							
187	Fortune.....	\$1,974.01	\$15,196.45		\$41.70	\$852.06	\$1,526.97
188	Iroquois.....		16,190.90			909.17	286.00
189	Iwans.....		861.48				
190	Navajo.....		5,757.88			1,232.17	779.17
191	Nina.....	1,722.13	9,717.30			279.67	640.52
192	Patasco.....	5,035.13	13,876.15		150.60	212.90	1,208.26
193	Patuxent.....	3,939.09	10,470.33		66.60	105.90	1,354.08
194	Pawtucket.....		3,307.10				35
195	Piscataqua.....	2,091.67	17,461.32		110.10	268.50	1,621.17
196	Potomac.....	5,200.41	18,907.10		80.40	60.40	2,013.06
197	Sotoyomo.....		4,265.81				
198	Unaca.....	3,417.30	8,511.49		127.50		1,429.94
199	Wompatuck.....	2,793.06	14,472.17		135.30	351.00	1,460.36
200	Sioux.....		1,089.91				
		<i>26,142.80</i>	<i>140,066.41</i>		<i>712.20</i>	<i>4,372.12</i>	<i>12,442.20</i>
RECEIVING SHIPS.							
201	Constellation and appren- tice seamen.	188,579.20	654,197.78		239.10	12,302.38	26,909.23
202	Franklin.....	60,692.50	707,768.50	\$10,298.86	334.20	21,176.91	24,571.15
203	Hancock.....	47,797.94	613,871.91	23,229.34	370.50	25,516.89	9,804.00
204	Independence.....	39,257.74	372,111.72	10,099.82	293.10	12,205.28	8,736.72
205	Lancaster.....	31,518.85	273,068.47	11,015.24	439.50	9,402.26	7,237.31
206	Pensacola.....	19,444.32	353,075.63	6,298.35	518.20	9,169.97	18,326.01
207	Philadelphia.....	16,653.86	147,299.47	18,477.58		5,116.27	3,466.42
208	Seamen quarters.....		200,889.30			558.25	
209	Wabash.....	30,168.97	275,125.21	11,897.03	4.80	20,538.22	3,242.94
210	Southery.....	8,107.44	158,981.17	61,141.46		40,875.24	1,922.23
211	Nipsic.....		20,731.71	1,074.16		4,588.98	
212	Topeka.....					26.70	1,432.45
		<i>442,226.82</i>	<i>3,777,120.35</i>	<i>160,151.82</i>	<i>2,199.40</i>	<i>161,667.55</i>	<i>166,669.21</i>
	Total.....	<i>4,659,514.79</i>	<i>18,261,918.58</i>	<i>704,649.44</i>	<i>82,972.70</i>	<i>1,298,048.78</i>	<i>868,175.43</i>
213	Fish Commission vessels (Title M).	29,733.29	49,650.54		393.00	1,361.29	

STATEMENT F—Continued.

mission during fiscal year ending June 30, 1910—Continued.

Value of stores expended—Continued.					Total expenditures under Title C, cost of commission.	Cost of repairs to hull, machinery and equipage.	Total cost of maintenance of ships.	No. of months in commission.
Ordnance.	Construction and repair.	Steam engineering.	Supplies and accounts.	Medicine and surgery.				
	\$746.16	\$8,645.61	\$7,442.42		\$36,425.38	\$12,326.33	\$48,751.71	12 187
	202.44	827.29	2,985.05		21,400.94	575.59	21,976.53	9 188
			519.39		1,580.81	2,641.69	4,222.50	12 189
\$1,488.33	210.30	3,728.63	1,576.26		14,772.76	12,342.78	27,115.54	12 190
	600.53	1,878.39	2,702.66		17,541.50	911.76	18,453.26	9 191
	750.35	4,657.90	3,537.53		20,399.94	9,061.47	38,461.41	12 192
10.00	1,198.01	4,244.89	2,130.17		23,519.60	6,186.14	29,705.74	9 193
			1,452.93		4,760.38	1,142.11	5,902.49	12 194
	857.45	14,960.83	7,136.42		44,559.06	7,115.52	51,674.58	12 195
50.00	1,245.51	4,963.77	4,548.57		37,069.22	17,427.74	54,496.96	12 196
			1,365.80		5,631.61	3,614.27	9,245.88	12 197
	390.19	1,741.59	1,697.96		17,361.97	1,488.07	18,850.04	9 198
	449.36	5,780.19	6,601.60		32,043.16	14,995.83	47,038.99	12 199
			565.31		1,655.22	2,617.69	4,272.91	3 200
1,648.33	6,036.30	51,429.09	44,262.10		287,621.55	92,440.19	379,967.74	
7,824.56	7,861.06	11,543.83	220,130.92		1,129,588.06	3,910.92	1,133,498.98	12 201
5,379.27	7,768.28	19,477.38	165,565.42	\$2,080.57	1,025,113.10	10,801.32	1,035,914.42	12 202
902.78	4,751.43	19,098.69	89,717.89	1,031.25	853,693.61	16,715.31	859,408.92	12 203
567.90	2,986.30	12,230.07	53,211.16	727.43	519,027.22	2,258.96	521,286.18	12 204
298.28	1,869.87	1,742.58	51,741.44	485.72	388,929.52	3,586.01	392,515.53	12 205
1,523.97	5,704.44	13,443.31	113,798.96		641,303.16	41.29	641,344.45	12 206
192.85	4,158.87	10,775.07	34,073.00	588.37	240,801.76	8,294.48	249,096.24	12 207
			17,797.16		219,244.71		219,244.71	12 208
541.04	3,177.21	4,031.56	47,622.35	683.98	397,032.41	4,832.23	401,864.64	12 209
	2,195.67	3,977.92	24,811.32	541.30	302,554.53	1,850.49	304,404.93	12 210
					26,394.85	522.14	26,916.99	12 211
	942.80	223.20			2,018.52	992.02	3,065.54	12 212
17,280.65	41,416.08	97,145.61	815,469.62	6,424.89	5,626,596.45	53,485.68	6,680,081.53	
2,075,384.80	677,465.48	4,893,310.15	4,798,097.41	76,552.74	37,783,658.27	7,030,757.71	44,814,416.98	
			12,813.89	134.54	94,086.85		94,086.85	12 213

STATEMENT G.

Statement of public sales of condemned government property.

Date of sale.	Place of sale.	By whom deposited.	Gross receipts.	Expenses of sale.	Net receipts.	Credited to miscellaneous receipts.	Credited to appropriation—	
							Clothing and small stores.	Ordnance material, proceeds of sales.
Nov. 22, 1909	Boston, Mass.	H. E. Stevens.	\$19,590.41	\$424.93	\$19,165.48	\$19,042.44	\$92.56	\$30.48
Dec. 17, 1909	do.	do.	30.00	4.98	25.02	25.02		
Apr. 22, 1910	do.	do.	13,563.32	330.75	13,232.57	13,155.04		77.53
May 6, 1910	do.	do.	1,778.16	18.00	1,760.16	1,760.16		
Aug. 23, 1909	Naval training station, Newport, R. I.	T. S. O'Leary.	1,429.40	6.44	1,422.96	900.64		462.32
June 1, 1909	New York, N. Y.	Reah Fraser.	36,250.51	1,858.27	34,392.24	23,552.25	9,526.89	983.10
June 14, 1909	do.	do.	535.00	5.84	529.16	529.16		
Dec. 21, 1909	do.	do.	9,553.98	690.73	8,863.25	8,863.25		
Feb. 17, 1910	do.	do.	19,386.43	632.73	18,753.70	12,336.55	6,144.82	272.33
Mar. 4, 1910	do.	do.	2,673.65	13.35	2,660.30			
Mar. 18, 1910	do.	do.	3,073.69	5.25	3,068.44			
May 14, 1910	do.	do.	44.00		44.00	44.00		
Oct. 6, 1909	Philadelphia, Pa.	F. B. Colby.	11,747.27	434.01	11,313.26	11,313.26		
Feb. 21, 1910	Naval Academy.	T. J. Cowie.	3.00		3.00	3.00		
Apr. 7, 1910	do.	do.	4.00		4.00	4.00		
May 12, 1910	do.	do.	8,796.30	9.00	8,787.30	8,787.30		
Nov. 8, 1903	Washington, D. C.	S. L. Heap.	146,009.07	227.08	145,781.99	1,296.81		144,483.18
Apr. 26, 1910	do.	do.	731.51		731.51	731.51		
Mar. 10, 1909	Norfolk, Va.	W. B. Rogers.	9,790.98		9,790.98	8,014.89		596.30
Aug. 23, 1909	do.	do.	13,129.73	585.18	12,544.55	11,507.35	378.99	638.01
May 9, 1910	do.	do.	25,532.84	1,029.89	24,502.95	24,500.10		322.85
Aug. 1, 1909	Key West, Fla.	Geo. G. Seibels.	2,911.24	14.25	2,896.99	576.99		
Aug. 1, 1909	Pensacola, Fla.	R. M. Dolson.	2,378.13	15.50	2,362.63	2,362.63		
Feb. 10, 1910	do.	do.	387.50		387.50			155.47
July 23, 1909	Mare Island, Cal.	C. M. Ray.	25,361.49	401.03	24,960.46	16,951.70	7,834.48	197.95
Mar. 8, 1910	do.	do.	31.00		31.00	31.00		
Apr. 7, 1910	do.	do.	30.00		30.00	30.00		
Apr. 27, 1909	Fugate Sound, Wash.	E. F. Hall.	185.00		185.00	185.00		
Mar. 5, 1910	do.	E. E. Wilson, Jr.	11,197.20	373.10	10,824.10	8,009.12	2,482.73	172.25
Apr. 26, 1910	do.	do.	58.51		58.51	111.69		
Sept. 27, 1909	Cavite, P. I.	D. V. Chadwick.	188.06	2.98	185.08	185.08		
Jan. 25, 1910	do.	do.	450.00	25.13	424.87	424.87		

Feb. 28, 1910	Naval recruiting station, Denver, Colo.	W. V. Tomb	11.00	11.00	11.00
Mar. 25, 1910	U. S. S. Wolverine	M. C. McDonald	73.49	73.49	73.49
Apr. 27, 1910	do.	G. P. Shamer	35.50	35.50	35.50
	Total		365,065.36	8,344.95	179,185.87
					29,120.77
					148,403.77

RECAPITULATION.

Boston	\$34,961.89
Naval training station, Newport, R. I.	1,429.40
New York	71,497.26
Philadelphia	11,747.27
Naval Academy, Annapolis	8,803.30
Washington	146,740.58
Norfolk	48,753.55
Key West	591.24
Pensacola	2,865.03
Mare Island	26,424.49
Puget Sound	11,452.70
Cavite, P. I.	638.06
Naval recruiting station, Denver, Colo	11.00
U. S. S. Wolverine	108.99
Gross proceeds	365,065.36
Expenses of sales	8,344.95
Net proceeds	356,710.41
Deposited to credit:	
Miscellaneous receipts	179,185.87
Clothing and small-stores fund	29,120.77
Ordinance material, proceeds of sales	148,403.77
Total	356,710.41

STATEMENT G—Continued.

List of purchasers, with amounts received from each.

Navy-yard, Boston, Mass., Nov. 22, 1909:		Navy-yard, Boston, Mass., Apr. 22, 1910—Continued.	
Oscar Schultz.....	\$5.50	Atlantic Mill Supply Co.....	\$28.50
J. J. Chaulk.....	135.51	S. Butter & Co.....	568.00
Thos. J. Burke.....	5.10	L. Sovrensky.....	125.00
J. W. Cross.....	1.00	Thos. Butler & Co.....	94.72
Jas. Robertson.....	34.25	L. Miller & Co.....	427.77
Drew Machinery Agency.....	708.00	A. Wolf Co.....	2,835.07
M. Norton & Co.....	300.00	J. J. Duffy.....	150.00
Manhattan Machinery Exchange.....	399.68		
J. F. Foster.....	37.00		13,563.32
H. R. Beecher.....	62.50		
J. F. Stone.....	10.26		
Chas. S. Purves.....	97.86	Navy-yard, Boston, Mass., May 6, 1910:	
Gutterson & Gould.....	1,031.24	A. Wolf & Co.....	1,778.16
C. S. McDonald.....	6.30		
D. J. Reagan Co.....	317.77	Naval training station, Newport, R. I.,	
S. Butter & Co.....	1,225.93	Aug. 23, 1909:	
Francis Bannerman.....	125.77	Max David.....	885.83
Jas. Barry.....	5.00	Nathan David.....	86.16
Nathan M. Carman.....	163.00	Smith & Adler.....	457.41
J. F. Nolan.....	30.31		
Chas. Carroll.....	30.00		1,429.40
F. Hogan.....	31.25		
E. K. Attwood.....	2.00	Navy-yard, New York, N. Y., Feb. 17,	
C. S. Clifford.....	92.46	1910:	
C. H. Squires.....	77.37	B. B. Abrahams.....	1,840.35
M. L. Kelly.....	125.00	General Supply Iron, Steel and Rail	
P. Bloomfield Co.....	13,567.60	Co.....	1,646.15
Schoellhorn-Allbrecht Machinery Co.....	72.00	Charles Seligman.....	820.76
Fore River Shipbuilding Co.....	450.00	W. Stokes Kirk.....	1,070.37
G. W. Pitfield.....	51.00	Dreifus & Co.....	224.71
Joe Cotter.....	389.75	B. Breslof.....	149.20
		Jos. Adesso.....	359.10
	19,500.41	Alex. Sloan, Jr., & Co.....	109.51
		C. Osterman.....	40.00
Navy-yard, Boston, Mass., Dec. 17, 1909:		J. Szerlip.....	51.01
James P. Mack.....	30.00	Jas. J. McNally.....	3.56
		S. Rawlster & Co.....	413.95
Navy-yard, Boston, Mass., Apr. 22, 1910:		Grant Bethel.....	157.50
Oscar Schultz.....	17.50	K. Linn.....	34.92
G. A. Erickson.....	20.85	H. Lewinske.....	491.00
Edward Moore.....	53.75	H. J. Smith.....	36.00
Henry Parsons.....	2.00	J. J. Duffy.....	64.40
J. F. Nolan.....	20.00	Walsh Sons & Co.....	517.46
C. A. Gage.....	4.05	Marcine Metal and Supply Co.....	42.86
P. Bloomfield Co.....	166.66	Thos. Sullivan.....	9.50
J. Moshkowitz.....	208.45	P. Murray.....	178.30
S. M. Decker.....	10.00	Nassau Smelting and Refining	
C. J. Donovan.....	945.75	Works.....	922.00
Woburn Machine Co.....	375.00	Francis Bannerman.....	107.77
J. E. Gallagher.....	7.10	H. Werby.....	35.80
Joe Cotter.....	155.60	Benjamin's.....	168.00
M. Norton & Co.....	945.70	Fred Craemer.....	404.10
C. S. Dodge.....	470.00	L. Chesler.....	8.76
W. H. Perry.....	482.71	Jos. Freedman.....	959.08
Wm. Read & Sons.....	79.51	J. McGovern.....	5.00
Wm. F. Hudson.....	90.00	Chas. S. Purves.....	185.97
E. de Witt.....	100.00	Roy Engineering Iron Works (In-	
C. H. Riley, jr.....	21.75	corporated).....	38.39
B. Nelligan.....	68.00	Empire Repair Co.....	90.00
M. J. O'Donnell.....	36.00	R. G. Packard & Co.....	257.73
Peter Creegan.....	55.00	Wm. J. Bannerman.....	162.14
Thos. Butler & Co.....	218.15	Thos. Meagher.....	469.50
J. J. Chaulk.....	1,032.57	J. J. Mahoney.....	145.78
O'Connor Bros.....	231.13	Marvin Briggs & Co.....	263.26
P. S. Haley.....	1.50	Henry Hoverkoch.....	5.00
Carl Johnson.....	45.00	O. P. Engstrom.....	5.25
A. Werby.....	457.91	M. R. Rodrigues.....	8.17
American Metal and Iron Co.....	1,441.97	Jos. Bauer.....	9.82
J. Lipsitz.....	172.27	H. Blume & Son.....	260.61
A. Vanacone.....	191.00	A. Schradler's Sons (Incorporated).....	450.00
C. S. Purves.....	389.76	Wm. Harrison.....	104.60
Gutterson & Gould.....	213.25	John Boyle.....	36.25
F. E. Gore.....	101.00	Chas. W. Sachtleben.....	155.00
Wm. S. Nolan.....	136.60	Holbrook, Cabot & Rollins Corpo-	
F. A. Keniston.....	51.00	ration.....	150.00
J. F. Foster.....	15.10	John J. Gilligan.....	75.00
R. T. Green Co.....	15.00	A. Vanacone.....	52.08
Morrow Bros.....	40.00	L. Stutz.....	6.25
Union Metal Works.....	6.00	Jas. S. Pennefather.....	4.60
Thos. J. Burke.....	236.67	Kahn Bros.....	2,206.61
C. M. Leach.....	3.00	Michael Flynn.....	187.45

STATEMENT G—Continued.

List of purchasers, with amounts received from each—Continued.

Navy-yard, New York, N. Y., Feb. 17, 1910—Continued.		Navy-yard, New York, N. Y., June 1, 1909—Continued.	
Grant Bethel.....	\$118. 10	Olney & Warrin.....	\$8. 00
G. Wilson.....	6. 00	Marvin Briggs & Co. (Incorporated).....	248. 00
R. Tobin & Son.....	1,342. 28	Thomas J. Reilly.....	105. 00
Bishop Gutta Percha Co.....	25. 50	Fred Treger.....	76. 75
Greenblatt Supply Co.....	203. 89	Wm. H. Palmer.....	41. 25
K. Kominsky.....	35. 65	Thomas Tomlinson.....	187. 50
F. N. Monjo.....	5. 00	R. W. Demass.....	80. 00
J. Blum.....	60. 00	John J. Cass.....	21. 00
Jeremiah A. McLean.....	60. 00	James L. Pennefather.....	14. 55
Barney Hess.....	907. 72	C. Osterman.....	72. 58
E. A. Gilderson.....	50. 25	Joseph L. Schmidt.....	51. 51
John Shannon.....	56. 25	John Shannon.....	35. 00
Wheeler & Twine.....	315. 00	Thomas Mathews.....	50. 51
	19,386. 43	Chas. S. Beniah.....	3,216. 79
		F. F. Meyer, Jr.....	5. 00
Navy-yard, New York, N. Y., Mar. 18, 1910:		Wm. Eckbold Sons.....	235. 50
Jos. Rosenberg.....	206. 00	K. Kominsky.....	15. 75
Josef Fleischer.....	2,644. 10	R. Tobin & Son.....	129. 82
A. M. Powell.....	137. 20	Illinois Smelting and Refining Co.....	12. 70
L. C. Pontez.....	40. 03	J. J. Mahoney.....	148. 23
Chas. Seligman.....	46. 36	N. Buchman.....	18. 50
	3,073. 69	Michael Flynn.....	109. 83
		John H. Hoyer.....	769. 74
Navy-yard, New York, N. Y., May 14, 1910:		Bishop Gutta Percha Co.....	6. 26
Swift & Co.....	44. 00	H. Blume & Sons.....	71. 40
		A. Edwards.....	414. 01
Navy-yard, New York, N. Y., Dec. 21, 1909:		The David Kaufman & Sons Co.....	127. 00
Joseph Mc Nerney.....	2,583. 28	Louis Millar Co.....	610. 00
W. A. Wilson.....	6,970. 70	Rubber Waste Co.....	51. 51
	9,553. 98	C. Heldt & Son.....	4. 50
		R. Lee Cuthbert.....	372. 00
Navy-yard, New York, N. Y., Mar. 4, 1910:		Abram L. Hirsh.....	365. 50
Joseph Libman & Co.....	1,141. 67	Berry & Aikens.....	10. 08
S. Rawster & Co.....	481. 57	Wm. H. Harrison.....	241. 68
John H. Lyon & Co.....	851. 55	Alfred J. Roser.....	79. 84
Wm. Hughes.....	198. 86	S. Rosenberg.....	45. 13
	2,673. 65		3,166. 25
			36,230. 51
Navy-yard, New York, N. Y., June 1, 1909:		Navy-yard, New York, N. Y., June 14, 1909:	
B. B. Abrahams.....	413. 53	Postal Telegraph-Cable Co.....	535. 00
Alex. Sloan, Jr., & Co.....	509. 58		
W. Stokes Kirk.....	3,951. 20	Navy-yard, Philadelphia, Pa., Oct. 6, 1909:	
Charles Seligman.....	613. 80	Fred Craemer.....	408. 32
Dreifus & Co.....	228. 35	A. V. Kaiser & Co.....	466. 08
Francis Bannerman.....	877. 84	W. Stokes Kirk.....	39. 00
K. Linn.....	90. 95	O. F. Nass.....	40. 00
Wm. J. Bannerman.....	898. 46	Antonio Vanacore.....	141. 33
Greenblatt Supply Co.....	179. 43	Geo. F. Swift.....	140. 84
Cal. Hirsch & Sons Iron and Rail Co.....	1,932. 14	J. H. Well & Co.....	25. 00
M. R. Rodrigues.....	75. 17	Daniel Dougherty.....	56. 00
L. C. Pontez.....	167. 16	John J. Chaulk.....	1,589. 32
N. Frank & Sons.....	68. 03	John J. McGrath.....	106. 47
H. J. Smith.....	40. 50	Dreifus & Co.....	254. 65
H. Lewinske.....	112. 34	Purves Machinery Co.....	25. 01
The Roy Engineering Iron Works Incorporated.....	626. 10	Wm. J. Bannerman.....	387. 68
John O'Connor.....	103. 00	Frank Hainsworth.....	28. 15
John J. Duffy.....	820. 32	Cyrus Radford.....	18. 00
The Nassau Smelting and Refining Works.....	1,975. 30	Theo. Rudolph.....	13. 00
H. Blume & Sons.....	56. 51	Chas. Grelsing.....	12. 00
R. G. Packard Co.....	286. 80	Robert B. Stetser.....	33. 00
Marine Metal Supply Co.....	69. 44	Samuel Hurley.....	167. 67
Joseph J. Reilly.....	179. 00	L. F. Seyfert's Sons (Incorporated).....	31. 00
Joseph Bauer.....	169. 66	Cal. Hirsch & Sons Iron and Rail Co.....	26. 00
Frank Samuel.....	9,553. 67	Shoverling, Daly & Gales.....	38. 00
P. Murray.....	283. 50	Edward Corner.....	161. 20
Charles Pfeiffer.....	10. 55	Atlantic Mill Supply Co.....	65. 00
J. Szerlip.....	142. 94	Geo. Macauley.....	10. 25
Wm. H. Cummings & Sons.....	73. 56	Samuel & Henning.....	109. 30
Thomas Meszger.....	238. 35	John J. Reilly.....	26. 00
Fred Craemer.....	205. 10	James Burcher.....	76. 90
Wolf Moskowitz.....	49. 56	H. A. Hiltner Sons Co.....	3,923. 76
		D. J. Hartigan.....	206. 00
		H. Alex. Johnson.....	88. 90
		Atlantic Dredging Co.....	380. 62
		Henry Berkowitz.....	155. 00
		Geo. F. Schilling.....	76. 25
		Wm. Dinlocker.....	211. 00
			155. 55

STATEMENT G—Continued.

List of purchasers, with amounts received from each—Continued.

Navy-yard, Philadelphia, Pa., Oct. 6, 1909—Continued.			Navy-yard, Norfolk, Va., Aug. 25, 1909—Continued.	
Walter T. Jackson.....	\$111.31	Cal. Hirsch & Sons.....	\$85.30	
J. F. Robert Wurch.....	72.00	N. Block & Co.....	8,380.25	
James Kelly.....	76.25	John J. Chauk.....	597.92	
A. L. Porter.....	86.25	W. H. H. Cory.....	15.75	
Fred Erie.....	90.00	Berkley Machine Works.....	49.25	
Geo. W. Cairns.....	75.00	E. P. Lindsay.....	103.53	
Edw. H. Faith.....	76.50	Nichols & Hodges.....	3.10	
F. S. Carter.....	97.00	W. G. Maupin.....	63.16	
Edwin A. Grover.....	76.60	W. Stokes Kirk.....	36.38	
E. Billetter.....	27.00	Bernheimer & Co.....	8.00	
George Klster.....	20.10	W. I. Clements.....	13.30	
Latta & Terry Construction Co.....	26.00	Jas. P. Knight.....	45.00	
S. J. Fowkes & Co.....	1,113.61		18.56	
Star Smelting and Refining Co.....	107.50			
	<u>11,747.27</u>			<u>13,129.73</u>
Naval Academy, Annapolis, Md., Feb. 21, 1910:		Navy-yard, Norfolk, Va., Mar. 10, 1909:		
J. Writ Randall.....	3.00	J. W. Miller.....	3,707.18	
Naval Academy, Annapolis, Md., Apr. 7, 1910:		Louis A. Tarr.....	78.97	
J. E. McCusker.....	4.00	Cal. Hirsch & Sons.....	1,062.75	
Naval Academy, Annapolis, Md., May 12, 1910:		Jas. W. Bain.....	102.11	
Joseph W. Duvall.....	85.00	Henry Zanger.....	81.75	
Henry Bernheimer.....	637.50	Nichols & Hodges.....	44.98	
De Ved & Sons Sash Weight Co.....	111.37	R. Goldstein & Sons.....	114.43	
J. W. Trautwein.....	128.00	Robt. McDermott.....	383.00	
H. J. Segall.....	203.02	Eugene Rosenfeld & Co.....	120.00	
National Iron Co.....	4,526.76	Dreifus & Co.....	126.35	
The Monumental Iron and Metal Co.....	3.00	Jno. J. Kirk.....	26.72	
Boston Iron and Metal Co.....	2,401.65	W. Stokes Kirk.....	90.50	
Farinholz-Meredith Co.....	700.00	Francis Bannerman.....	50.57	
	<u>8,796.30</u>	Maryland Building and Wrecking Co.....	487.73	
Navy-yard, Washington, D. C., Nov. 8, 1909:		John J. Chauk.....	564.86	
Edw. Mullin.....	75.61	Purves Machinery Co.....	57.79	
Jos. Rosenthal's Sons (Incorporated).....	8,019.84	Jno. C. McQuigan.....	109.78	
Vulcan Louisville Smelting Co.....	8,665.89	Jno. A. Nottenson.....	1,528.43	
J. Dreifus & Sons.....	48.02	Simon Kloff.....	10.00	
Great Western Smelting and Refining Co.....	36,446.19	W. J. King.....	310.00	
Lewis Hopfenmaier.....	272.70	H. B. Williamson.....	6.00	
J. Moshkowitz.....	268.56	C. E. Brawner.....	51.63	
Dreifus & Co.....	298.70	L. C. Pontez.....	90.18	
Nassau Smelting and Refining Works.....	67,495.16	Schoveling, Daly & Gale.....	64.50	
H. C. Bradley.....	18.50	J. A. Pritchard.....	35.75	
John Nuttall.....	11.25	Geo. T. Wallace, Jr.....	82.95	
W. D. Briscoe.....	100.00	W. T. Parker.....	2.30	
C. J. Crowley.....	61.50	M. T. Cashin.....	25.62	
Horace E. Brown.....	10.79	J. Dreifus & Sons.....	12.25	
Frank Samuel.....	1,012.25	A. McClean & Co.....	46.00	
W. Stokes Kirk.....	443.19	R. Curtis & Co.....	19.75	
Morris Weil.....	4,043.41	Hampton Roads Boat Building Co.....	20.00	
Purves Machinery and Iron Co.....	143.83	H. E. Foster.....	5.32	
Herman L. Winterer.....	1,723.00	N. B. Holmes.....	3.56	
Girard Iron and Metal Co.....	15,883.77	Chas. H. Chapman.....	11.84	
John J. Chauk.....	404.13	D. W. Washburn.....	1.30	
Alexandria Iron Works.....	150.00	Reed Bros. & Co.....	3.42	
Cook, Bernheimer & Co.....	286.40	F. J. Hulcher.....	.50	
Ben Einstein.....	126.38	D. D. Hitchings.....	10.50	
	<u>146,009.07</u>	B. R. Jordan.....	18.13	
Navy-yard, Washington, D. C., Apr. 20, 1910:		W. H. Luck.....	18.76	
Ben Einstein.....	731.51	W. F. D. Williams.....	21.00	
Navy-yard, Norfolk, Va., Aug. 25, 1909:		Berkley Machine Works.....	131.00	
Francis Bannerman.....	830.30	J. T. Halstead.....	25.00	
R. Goldstein & Son.....	143.15	Ed. Mullen.....	25.61	
Dreifus & Co.....	1,596.80		<u>9,790.98</u>	
C. E. Drumwright.....	7.40	Navy-yard, Norfolk, Va., May 9, 1910:		
Louis A. Tarr.....	637.62	Virginia Hide and Fur Co.....	1,861.05	
M. T. Cashin.....	112.62	Ben Einstein.....	119.04	
Industrial Corporation of Norfolk.....	23.27	Nichols & Hodges.....	160.05	
J. Dreifus & Son.....	359.05	J. Dreifus & Sons.....	250.00	
		Cal. Hirsch & Sons Co.....	744.84	
		W. H. Luck.....	6.84	
		R. Goldstein & Son.....	523.01	
		M. T. Cashin.....	737.71	
		Stidham & Sons.....	71.60	
		S. Bensinger.....	526.00	
		Henry Berkewitz.....	32.50	
		Dreifus & Co.....	126.95	
		W. S. Rosenfeld Electric Co.....	63.00	
		A. McClean & Co.....	972.56	
		Louis A. Tarr.....	168.53	

STATEMENT G—Continued.

List of purchasers, with amounts received from each—Continued.

Navy-yard, Norfolk, Va., May 9, 1910—Continued.

V. Cacao.....	\$119.75
Jno. J. Chaulk.....	958.31
J. H. Pritchard.....	37.90
B. C. Williams.....	8.85
John Higgins.....	4.25
F. J. Einstein.....	60.42
Camden Lumber Co.....	7.00
Henry Zanger.....	142.94
C. E. Potts.....	10.15
J. T. Morris.....	9.34
R. W. Fearl.....	5.00
W. M. Connor.....	124.50
J. M. Spring.....	8.60
Warwick Machine Co.....	241.36
Nassau Smelting and Refining Co.....	591.68
Jos. Rosenthal's Sons.....	2,806.56
R. H. Moses.....	18.10
Geo. W. Halstead.....	20.00
Frank Lindsay.....	20.00
J. C. Boss.....	45.00
J. F. Culppeper.....	11.00
W. S. Ferguson.....	82.00
D. D. Hitchings.....	6.50
W. N. Pallett.....	15.25
Geo. F. Schilling.....	221.50
Coastwise Dredging Co.....	226.00
Geo. Tuttle.....	36.00
S. Endel.....	25.00
Frank Toomey.....	902.53
Chas. Purves.....	210.73
E. T. Thomas.....	3.97
A. Ogg.....	35.00
R. B. Wood.....	50.40
N. Frank & Sons.....	61.51
Williams & Micholovitz.....	10,740.84
National Iron Co. of Baltimore.....	203.32
Frank Samuels.....	34.60
Berry & Aiken.....	7.10
McIntyre & Henderson.....	1,355.20
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	25,832.84

Naval station, Key West, Fla., Aug. 11, 1909:

Sabel Bros.....	316.74
Kaufman Metal Co.....	62.00
A. P. Ferguson.....	212.50
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	591.24

Navy-yard, Pensacola, Fla., Dec. 10, 1909:

John S. Bell & Sons.....	138.00
Gulf Machine Works.....	635.75
D. Levy.....	1,158.77
Pensacola Cabinet Works.....	78.00
A. Marx & Sons.....	326.51
John Rance.....	1.00
C. E. Miller.....	1.10
J. E. Concannon.....	1.50
B. P. Edmundson.....	28.00
E. H. Kirby.....	9.50
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	2,378.13

Navy-yard, Pensacola, Fla., Feb. 4, 1910:

Gulf Machine Works.....	487.50
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Navy-yard, Mare Island, Cal., July 23, 1909:

Western Machinery Co.....	1,284.00
Sugarman Bros.....	9,010.61
Enterprise Electric Co.....	430.40
Chas. Harley & Co.....	211.56
S. F. Bridge Co.....	330.00
Geo. D. Jeffrey.....	110.00
D. G. Barry.....	51.00
Geo. Druager.....	76.50
E. S. Pigott.....	21.00
Manuel M. Silveira.....	76.12
Geo. F. Hilton.....	83.56

Navy-yard, Mare Island, Cal., July 23, 1909—Continued.

Chas. Lang.....	\$65.00
A. D. Porter.....	127.00
V. Grothwell.....	231.10
A. Rosenberg.....	114.00
Geo. E. Sweeney.....	508.00
M. Davidson.....	252.50
S. Cooper.....	306.00
J. S. Philpott.....	56.00
F. W. Krough.....	752.00
J. L. Hieks.....	208.50
Dyer Bros.....	61.00
W. S. Ray Manufacturing Co. (Incorporated).....	200.00
Monroe & Bowcher.....	65.00
W. Stokes Kirk.....	6,263.40
Chas. E. Loeffler.....	102.75
H. Friend & Levy.....	225.00
Spiro Harness and Carriage Co.....	5.15
Jennie Moshkowitz.....	325.78
Boesch Lamp Co.....	32.50
Hyman Goldwater.....	50.00
Edw. R. Reichert.....	6.25
J. Gollober.....	25.00
I. Wollenberg.....	872.05
Jacobson Reimers & Co.....	942.15
Joseph Harris.....	800.25
Stabens & Freidman.....	252.75
Simon Johnston.....	381.00
Chas. Seligman.....	371.84
Francis Bannerman.....	88.87
Louis Weule.....	18.00
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	25,384.49

Navy-yard, Mare Island, Cal., Mar. 8, 1910:

Vallejo Ferry Co.....	10.00
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Navy-yard, Mare Island, Cal., Apr. 7, 1910:

A. M. Pippin.....	30.00
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Navy-yard, Puget Sound, Wash., Sept. 27, 1909:

Olympic Foundry Co.....	185.00
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Navy-yard, Puget Sound, Wash., Mar. 5, 1910:

Alaska Junk Co.....	881.27
Lida Barnes.....	2.50
A. C. Bjornstad.....	8.65
Cameron & Etridge.....	152.20
Chicago Junk Co.....	153.00
Bert L. Douglass.....	57.50
M. J. Ford.....	74.00
R. B. Fryett.....	128.00
Chas. O. Golden.....	331.00
A. Goldman.....	10.00
Great Western Smelting and Refining Co.....	844.60
Wm. Greenberg.....	459.03
P. A. Hallberg.....	80.35
Joseph Hoffman.....	10.00
F. R. Howard.....	110.00
A. M. Kilgore.....	3.75
J. P. Kirk.....	2,244.80
E. Klinghammer.....	21.25
Mrs. John Levin.....	1.50
Levi Gustave & Neff.....	115.00
M. Lund.....	3.00
Sol Morenstein.....	68.77
N. Mersch.....	10.00
G. H. McNeil.....	5.75
Miller Machinery Supply Co.....	85.00
The Moran Co.....	4.50
Daniel Neeson.....	1.00
Alex F. Penor.....	19.40
Frederic A. Richardson.....	10.50
J. D. Rubenstein.....	566.20
A. Ruffner.....	5.00
Seattle Junk Co.....	807.35
Seattle Steel Co.....	3,166.32

STATEMENT G—Continued.

List of purchasers, with amounts received from each—Continued.

Navy-yard, Puget Sound, Wash., Mar. 5, 1910—Continued.		Naval station, Cavite, P. I., Sept. 27, 1909.	
W. K. Spaulding.....	\$15.00	Tan Ticco.....	\$188.06
S. Steingeld.....	21.25	Naval Station, Cavite, P. I., Jan. 25, 1910:	
Sunde & Erland Co.....	29.00	Carlos Valls.....	450.00
Sunset Boat and Engine Co.....	142.75	U. S. Navy recruiting station, Denver, Colo., Feb. 28, 1910:	
Francis Weber.....	50.00	Ward Auction Co.....	11.00
P. Winfield.....	67.00	U. S. S. Wolverine, Erie, Pa., Apr. 27, 1910:	
P. J. Wold.....	331.00	Edward Crossley.....	35.50
	<u>11,127.20</u>		
Navy-yard, Puget Sound, Wash., Apr. 26, 1910:		U. S. S. Wolverine, Erie, Pa., Mar. 25, 1910:	
D. Colsky.....	152.50	Edward Crossley.....	69.74
Wm. Greenberg.....	18.00	Victoria Metal Co.....	3.75
	<u>170.50</u>		<u>73.49</u>

STATEMENT H.

Statement of receipts and expenditures of provisions, fiscal year 1910.

RECEIPTS.		
Balances July 1, 1909:		
On hand at navy-yards and stations.....	\$878,337.57	
On board ships in commission.....	701,214.78	
In transit.....	102,687.72	
		\$1,682,240.07
Receipts at navy-yards and stations:		
Transfers from pay officers.....	1,478,564.15	
Purchases.....	2,349,437.98	
From United States Army.....	82,475.86	
From United States Marine Corps.....	3,363.73	
From naval supply fund.....	31.51	
From coffee mill (roasted and ground).....	136,260.90	
From ice plant, Guantanamo, Cuba.....	5,198.14	
Gain on adjustment of books with stock.....	874.04	
		4,056,206.31
Receipts on board ships:		
Transfers from pay officers.....	3,760,136.46	
Purchases.....	2,743,216.75	
From naval supply fund.....	1,433.58	
From United States Marine Corps.....	22,336.46	
From clothing and small stores.....	158.40	
Gain from advanced prices.....	25,003.70	
		6,552,384.33
Total.....		12,290,830.71
EXPENDITURES.		
Expenditures at navy-yards and stations:		
Transfers to pay officers.....	3,807,427.04	
For use (expense account).....	513.82	
Condemned by survey to loss.....	26,969.66	
Condemned to be sold at auction.....	34,185.35	
Lost in transit.....	251.03	
Loss from reduced prices.....	3,480.06	
To other departments at yards.....	28,355.56	
To United States Marine Corps.....	70,787.61	
To naval supply fund.....	1,176.89	
To coffee mill (green coffee).....	134,131.18	
To United States Light-House Service.....	4.15	
Sales for cash.....	30,189.26	
Sales to civilian employes, island possessions.....	19,148.55	
Subsistence of lepers, island of Guam.....	2,390.33	
		4,168,019.40
Expenditures on board ships:		
Transfers to pay officers.....	1,431,273.57	
Issues to crew and marines.....	4,766,909.48	
Extra issues to engineer and dynamo force.....	87,182.87	
Issues to civilian crew, U. S. S. Relief.....	6,828.62	
Issues to surveying expedition, U. S. S. Hist.....	4,873.20	
To other departments of ships.....	11,241.55	
To United States Marine Corps.....	70,256.34	
To naval supply fund.....	527.93	
To naval militias.....	2,797.81	
To Red Cross Society, Bluefields, Nicaragua.....	652.69	
To revolutionary party, Nicaragua.....	10.00	
To ship's stores.....	7,518.87	
Sales to messes for cash.....	355,119.16	
Condemned by survey to loss.....	71,853.22	
Loss by wreck, U. S. S. Nina.....	72.36	
Loss on issues.....	21,729.38	
Deficit in pay officers' accounts.....	2,185.90	
		6,841,032.95
Balances June 30, 1910:		
On hand at navy-yards and stations.....	725,185.60	
On board ships in commission.....	445,008.74	
In transit.....	108,583.93	
		1,281,778.27
Total.....		12,290,830.71

STATEMENT H—Continued.

Statement of receipts and expenditures of clothing and small stores, fiscal year 1910—Con

EXPENDITURES.	
Expenditures at navy-yards and stations:	
Transfers to pay officers.....	\$3,439,847.96
To naval supply fund.....	30,855.88
To United States Marine Corps.....	254.56
To United States Revenue-Cutter Service.....	47,154.45
To United States naval prisons and prisoners.....	6,627.48
To naval clothing factory.....	266,318.18
To naval militias.....	30,690.73
To other departments at yards.....	6,113.56
To leper colony at Guam.....	12.00
Sales for cash.....	20,226.73
Condemned by survey to loss.....	2,741.22
Condemned by survey to be sold.....	44,424.44
Lost in transit.....	2,433.07
For use (experimental purposes).....	154.30
	\$3,897,854.56
Expenditures on ships:	
Transfers to pay officers.....	847,177.08
Issues to officers, crew, and marines.....	1,488,985.70
To United States Marine Corps.....	345.00
To naval prisoners.....	28,119.94
To naval supply fund.....	2,473.75
To other departments of ships.....	5,553.29
To provisions, navy.....	158.40
To ship's stores.....	54,352.43
Sales for cash.....	44,132.09
Alteration of clothing.....	64.29
Condemned by survey to loss.....	6,180.09
Loss on issues.....	3,731.22
Deficit in pay officers' accounts.....	16.24
For use (expense account).....	289.74
To Red Cross Society, Bluefields, Nicaragua.....	21.00
	2,481,680.32
Balances June 30, 1910:	
On hand at navy-yards and stations.....	2,458,737.81
On board ships in commission.....	906,217.16
In transit.....	151,521.25
	3,516,476.22
Less difference between cost and issuing prices.....	254,066.34
	3,262,409.88
Total.....	9,641,944.76

Statement of clothing and small stores fund, June 30, 1910.

ASSETS.	
Cash account:	
Balance in United States Treasury.....	\$221,787.32
Stock accounts:	
On hand at navy-yards and stations.....	\$2,458,737.81
On board ships in commission.....	906,217.16
In transit.....	151,521.25
	3,516,476.22
Less difference between cost and issuing prices.....	254,066.34
	3,262,409.88
On hand at naval clothing factory.....	147,062.32
On hand condemned to be sold.....	37,990.08
	3,447,462.28
Accounts in course of adjustment by the Auditor for the Navy Department:	
For issues, sales, and transfers.....	1,577,342.90
For sales at auction.....	3,012.75
	1,580,355.65
Total.....	5,249,605.25
LIABILITIES.	
Accounts in course of adjustment by the Auditor for the Navy Department:	
For purchases at navy-yards and stations.....	331,456.68
For purchases on board ships.....	1,401.06
For transfers from United States Marine Corps.....	1,934.60
For transfers from naval supply fund.....	609.50
For labor, heat, light, and power at naval clothing factory.....	11,898.23
	347,300.07
Clothing and small stores fund, June 30, 1910.....	4,902,305.18
Total.....	5,249,605.25

STATEMENT I.

Midshipmen's store fund.

ASSETS.	
Cash on hand and in subtreasury, Baltimore, Md.....	\$27,614.58
Merchandise on hand June 30, 1910, as per certified inventory on file in the Bureau of Supplies and Accounts.....	54,425.35
Accounts receivable (from midshipmen and other officers).....	1,889.02
Value of material in tailor shop June 30, 1910, as per certified inventory on file in the Bureau of Supplies and Accounts.....	831.17
	\$84,760.12
LIABILITIES.	
Accounts payable, being balances due on deposits received from midshipmen.....	20,449.77
The Holtzer-Cabot Electric Company.....	137.25
	20,587.02
Present worth.....	64,173.10
GAINS.	
Merchandise.....	6,653.46
Discount.....	2,002.80
Tailor shop.....	809.49
	9,465.75
EXPENSE.	
Expense (labor, clerk hire).....	6,180.00
Expense (office fixtures).....	167.25
Expense (sundry miscellaneous).....	404.21
	6,751.46
Net gain.....	2,714.29
Worth of fund June 30, 1909.....	61,458.81
Total worth of fund June 30, 1910.....	64,173.10

STATEMENT J.

SUMMARY OF CONTRACTS ENTERED INTO BY THE PAY-MASTER-GENERAL, U. S. NAVY, CHIEF OF THE BUREAU OF SUPPLIES AND ACCOUNTS, FOR MATERIAL AND SERVICES.

Value of material purchased, after newspaper advertisement and formal contract, as provided by section 5709, Revised Statutes, showing number of classes of material advertised, awards, number of separate proposals received, number of contracts entered into, total value thereof, etc., for the fiscal year ending June 30, 1910.

[This statement does not include contracts entered into by various purchasing pay officers.]

FISCAL YEAR ENDED JUNE 30, 1910.

Month.	Number of classes advertised.	Number of schedules issued.	Number of copies of schedules distributed.	Number of firms bidding.	Total number of bids received.	Average bids per class.	Number of contracts and bureau orders executed.	Total value of contracts and bureau orders.	Number of standard specifications in use.
1909.									
July	408	89	75,100	762	2,217	5.50	310	591,725.15	.....
August	536	131	102,800	1,001	2,654	4.95	424	843,731.87	.....
September.....	471	121	97,300	874	2,468	5.24	514	645,883.75	.....
October	425	94	80,000	845	2,403	5.65	342	827,600.19	.....
November.....	627	148	127,000	924	3,387	5.40	518	1,491,775.83	.....
December.....	414	105	88,700	824	2,328	5.62	333	795,806.57	.....
1910.									
January	374	99	81,100	893	2,068	5.32	291	631,516.23	.....
February.....	267	86	66,800	731	1,420	5.32	233	906,637.12	.....
March	338	83	72,900	884	1,868	5.32	251	677,631.70	.....
April	159	68	49,100	474	1,006	6.32	101	397,183.68	.....
May	384	112	89,500	850	2,137	5.56	288	970,410.68	.....
June.....	368	110	88,000	831	1,882	5.11	246	984,562.47	.....
Total fiscal year 1910..	4,766	1,251	1,019,500	9,893	25,888	5.42	3,851	9,714,484.74	763
Total fiscal year 1909..	5,508	1,315	1,134,000	11,776	31,527	5.75	4,294	16,425,303.63	661

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TABLE 1.—Statement of *Hawaii: California City Point, Cal.; and Atlantic Fleet,*

Vessels.	Cost.					
	In American bottoms.		Total in foreign and American bottoms.		Grand total.	
	Coal.	Transportation.	Coal.	Transportation.		
1996.						
Bouldieu.....	10		\$9,250.56	\$6,986.10	\$16,236.66	
Vercingetres.....	90		11,293.44	8,528.90	19,822.34	
Bon Champs.....	61		11,307.62	8,539.61	19,847.23	
La Rochefoucauld.....	70		11,377.92	8,592.70	19,970.62	
Achnashle.....	04		15,068.70	11,880.04	26,948.74	
S. Lochs.....	41		15,074.48	11,384.41	26,458.89	
Kene.....	80		11,374.08	8,580.80	19,954.88	
Total.....	66		84,746.80	64,061.50	148,808.30	
1997.						
Kumerie.....	30		25,947.20	43,314.30	69,261.50	
Hamilton.....	09		12,881.00	29,278.00	42,159.00	
Netherlee.....	00		16,379.00	37,225.00	53,604.00	
Angus.....	00		17,299.00	30,225.00	47,524.00	
C. of Aragon.....	75		15,217.65	30,193.75	45,411.40	
Total.....	05		83,624.85	170,233.05	253,857.90	
1998.						
B. F. Packard.....	25	\$9,074.10	\$21,993.00	9,074.10	21,963.00	30,977.10
Minerva.....	50		17,014.35	35,675.25	52,689.60	
Q. Elizabeth.....	00		16,318.30	36,575.50	52,893.80	
F. of Nith.....	00		17,895.20	39,897.00	57,692.20	
Fitzer.....	06		78,855.00	22,530.00	101,385.00	
Tabor.....	99		16,315.40	31,786.90	48,102.30	
Total.....	05	9,074.10	21,993.00	155,377.35	188,367.65	343,745.00
1999.						
Q. Amella.....	28	23,848.55	67,552.50	15,114.27	37,928.28	53,042.55
Missourian.....	25		23,868.55	67,552.50	91,421.05	
Kish.....	00		16,803.65	26,949.25	43,752.90	
Massachusetts.....	00	25,459.20	70,008.55	25,459.20	70,038.55	95,497.75
Total.....	53	49,327.75	137,561.05	\$1,245.67	202,438.58	283,684.25
1910.						
Strathyre.....	05		14,807.50	19,842.05	34,649.55	
Headley.....	85		11,727.50	15,714.55	27,442.05	
Strathgyle.....	33		14,498.75	19,428.33	33,927.08	
Strathgyle.....	50		14,375.00	19,262.50	33,637.50	
Strathgyle.....	35		13,548.75	17,884.35	31,433.10	
C. Finlister.....	30		12,350.45	16,635.90	28,986.35	
Riverdale.....	04		15,363.35	59,298.04	74,661.39	
B. Napier.....	80		15,484.00	20,292.50	35,776.50	
B. of Scotland.....	66		12,606.50	22,714.60	35,321.10	
Towergate.....	99		14,820.30	26,763.99	41,584.29	
Uganda.....	68		16,186.50	29,165.68	45,352.18	
C. Bors.....	50		20,256.00	56,487.50	76,743.50	
B. Bjornson.....	08					
Total.....	08		176,048.40	264,430.08	440,478.48	

TABLE 1.—Statement, *Hawaii; California City Point, Cal.; and Atlantic Fleet,*

Yard and station	Total cost, foreign and American.		Average cost, foreign and American		Grand total cost, coal and transportation, foreign and American.	Average cost, coal and transportation, foreign and American.
	Coal.	Transportation.	Coal.	Transportation.		
Puget Sound.....	\$84,746.89	\$64,001.56	\$3.84	\$2.60	\$148,748.36	\$6.74
Do.....	83,523.85	170,233.05	3.09	6.30	253,756.90	9.39
Do.....	155,277.25	188,367.05	3.79	4.59	343,745.00	8.38
Do.....	81,245.67	292,435.58	2.63	6.57	283,684.25	9.20
Do.....	176,048.40	264,430.08	2.58	3.85	440,478.48	6.43
Total.....	589,942.07	589,470.92	3.23	4.95	1,470,412.99	8.18
Honolulu.....	64,774.71	93,536.50	3.21	4.64	158,311.21	7.85
Do.....	155,935.83	348,174.28	2.95	6.58	504,110.11	9.63
Do.....	44,792.20	79,989.24	2.69	4.85	124,781.44	7.54
Do.....	266,515.16	469,422.02	2.62	4.54	735,937.18	7.16
Total.....	532,017.90	982,122.04	2.78	5.13	1,514,139.94	7.91
Mare Island.....	149,128.69	125,326.10	3.84	3.25	274,454.79	7.09
Do.....	100,128.53	362,484.30	2.80	6.47	522,612.83	9.33
Do.....	229,417.95	494,188.34	2.95	6.35	723,606.29	9.30
Do.....	66,719.55	147,545.05	2.71	6.00	214,264.60	8.71
Do.....	131,423.50	236,332.62	2.57	4.62	367,756.12	7.19
Total.....	736,818.22	1,365,876.41	2.97	5.50	2,102,694.63	8.47
California City Point.....	40,779.00	85,993.10	2.69	5.68	126,772.10	8.37
Do.....	141,188.10	244,692.42	2.57	4.44	385,190.52	7.61
Total.....	181,967.10	329,995.52	2.60	4.70	511,962.62	7.30
Atlantic Fleet, San Francisco and Honolulu.....	202,943.68	405,968.20	3.04	6.07	608,911.88	9.11
<hr/>						
Puget Sound.....	\$589,942.07	\$589,470.92	\$3.23	\$4.95	\$1,470,412.99	\$8.18
Honolulu.....	532,017.90	982,122.04	2.78	5.13	1,514,139.94	7.91
Mare Island.....	736,818.22	1,365,876.41	2.97	5.50	2,102,694.63	8.47
California City Point.....	181,967.10	329,995.52	2.60	4.71	511,962.62	7.30
Atlantic Fleet.....	202,943.68	405,968.20	3.04	6.07	608,911.88	9.11
Total.....	2,234,688.97	3,973,433.09	2.95	5.25	6,208,122.06	8.20

STATEMENT K—Continued.

Shipments from Atlantic range ports during past five years.

FOREIGN BOTTOMS.

Yard or station.	Freight rates per ton.			Unit cost of coal per ton.			Total average cost per ton, coal and transportation.
	Lowest.	Highest.	Average.	Lowest.	Highest.	Average.	
Puget Sound.....	\$3.29	\$6.65	\$3.22	\$2.45	\$3.15	\$4.63	\$7.95
Honolulu.....	3.38	6.85	4.92	2.45	3.30	2.78	7.70
Mare Island.....	3.30	6.50	5.01	2.45	3.10	3.03	8.04
California City Point.....	3.22	4.50	3.92	2.45	2.70	2.57	6.49
Atlantic Fleet, etc.....	5.75	6.15	6.07	2.65	3.40	3.04	9.11

AMERICAN BOTTOMS.

Puget Sound.....	\$7.00	\$7.50	\$7.29	\$2.60	\$2.90	\$2.66	\$9.95
Honolulu.....	5.07	6.25	5.85	2.50	3.10	2.77	8.62
Mare Island.....	5.75	8.00	6.95	2.50	3.20	2.79	9.74
California City Point.....	6.50	7.00	6.76	2.60	2.80	2.66	9.42
Atlantic Fleet, etc.....							

The average cost of all shipments, in foreign and American bottoms, both coal and transportation, from July 1, 1905, to July 1, 1910, has been:

	Per ton.
To Puget Sound.....	\$8.18
To Honolulu.....	7.91
To Mare Island.....	8.47
To California City Point, 1909-10.....	7.30
To Atlantic Fleet, etc.....	9.11

General average cost, coal and transportation, both foreign and American bottoms..... 8.20

Total shipments.

To Puget Sound:	Tons.
1906.....	22,068.80
1907.....	27,012.00
1908.....	41,022.50
1909.....	30,843.50
1910.....	68,732.00
	<u>179,678.80</u>
To Honolulu, Hawaii:	
1906.....	20,146.37
1908.....	52,941.50
1909.....	16,645.00
1910.....	101,599.60
	<u>191,332.47</u>
To Mare Island:	
1906.....	38,838.16
1907.....	56,012.50
1908.....	77,765.50
1909.....	24,612.00
1910.....	51,132.28
	<u>248,360.44</u>
To California City Point:	
1909.....	15,148.50
1910.....	55,016.00
	<u>70,164.50</u>
To Atlantic Fleet, San Francisco, and Honolulu:	
1908.....	66,807.50
Total.....	<u>756,343.71</u>

STATEMENT K—Continued.

TABLE 2.—Quantity of coal purchased at home and abroad (including all purchased by ships) for each fiscal year since 1892, and cost thereof, including transportation.

[NOTE.—The figures up to and including the fiscal year 1908 are taken from Bureau of Equipment reports.]

Year.	Domestic coal.			Foreign coal.		
	Quantity.	Total cost.	Average per ton.	Quantity.	Total cost.	Average per ton.
	<i>Tons.</i>			<i>Tons.</i>		
1892.....	38,450.00	\$221,918.66	\$5.77	35,017.00	\$298,948.55	\$8.53
1893.....	33,257.00	147,999.04	4.45	33,797.00	301,066.23	8.91
1894.....	42,190.00	178,163.58	4.22	62,146.00	462,192.38	8.86
1895.....	50,630.00	181,985.89	3.59	47,985.00	336,183.47	7.00
1896.....	55,162.00	196,795.40	3.57	61,741.00	423,335.98	6.85
1897.....	82,051.00	280,091.09	3.41	56,298.00	375,840.63	6.68
1898.....	387,437.00	1,520,119.75	4.02	74,111.00	601,885.53	8.12
1899.....	195,216.00	1,238,355.40	6.34	85,953.00	441,155.15	5.13
1900.....	141,921.00	834,527.34	5.88	86,476.00	738,125.63	8.535
1901.....	219,042.00	1,379,433.51	6.30	105,066.00	893,677.81	8.50
1902.....	293,438.00	1,543,869.35	5.26	88,602.00	676,341.74	7.63
1903.....	385,017.00	1,731,064.69	4.50	102,019.00	704,003.68	6.90
1904.....	295,344.00	1,708,446.25	4.32	103,232.00	511,483.57	7.86
1905.....	469,902.00	2,160,274.05	4.81	73,519.00	582,244.16	7.92
1906.....	621,286.00	2,480,661.27	3.99	51,581.00	348,370.77	6.76
1907.....	532,586.00	2,178,090.57	4.097	65,425.00	474,778.87	7.256
1908.....	771,928.00	4,546,405.11	5.889	64,461.00	622,419.24	9.66
1909.....	817,352.00	3,641,508.18	4.455	119,953.00	854,708.37	7.125
1910.....	994,217.30	4,331,150.36	4.356	26,619.30	177,713.72	6.676

The balance of steaming coal on hand June 30, 1910, was 342,807.48 tons, valued at \$1,845,273.12; in transit 226,408 tons, valued at \$1,384,931.23, making a total of 569,275.48 tons, valued at \$3,230,204.35 on hand and in transit.

TABLE 3.—Appropriations for coal and transportation for the last ten fiscal years.

Fiscal year.	Amount appropriated.	Deficiency appropriation.	Total.
1902.....	\$2,000,000	\$800,000	\$2,800,000
1903.....	2,500,000		2,500,000
1904.....	2,500,000	190,000	2,690,000
1905.....	2,750,000	210,000	2,960,000
1906.....	2,750,000	500,000	3,250,000
1907.....	3,750,000		3,750,000
1908.....	4,150,000	1,700,000	5,850,000
1909.....	5,000,000		5,000,000
1910.....	5,000,000		5,000,000
1911.....	4,000,000		4,000,000
1912.....	• 4,000,000		4,000,000

• Estimated.

STATEMENT L.

Showing the receipts and expenditures of clothing and public property of the Marine Corps during the fiscal year 1910, and the balances on hand July 1, 1909, and June 30, 1910.

	Clothing.	Public prop- erty.	Total.
RECEIVED.			
Balances on hand, July 1, 1909.....	\$1,243,044.61	\$1,430,614.47	\$2,673,659.08
Received since last return.....	1,059,009.30	533,569.18	1,593,178.48
On hand and received.....	2,302,653.91	1,964,183.65	4,266,837.56
EXPENDITURES.			
Expended by regular issue.....	424,830.79		424,830.79
Expended by extra issue.....	46,870.06	12,134.18	59,004.24
Expended for use.....	264,408.00	283,590.58	547,998.58
Condemned by survey.....	44,934.73	133,580.17	178,514.90
Total expenditures.....	781,043.58	429,304.93	1,210,348.51
Balances on hand June 30, 1910.....	1,521,610.33	1,534,878.72	3,056,489.05

STATEMENT M.

Showing the value of stores of the naval establishment, June 30, 1910.

Material and supplies in storehouses ashore and storerooms afloat, and in transit (Title X). (See Statement D).....	\$74,632,624.11
Equipment and supplies on board ships in commission and in transit (Titles B and Y). (See Statement E).....	64,727,748.18
Provisions in storehouses ashore and storerooms afloat, and in transit. (See Statement H). Contingent stores in storerooms afloat and in transit. (See Statement H).....	1,402,198.32
Clothing and small stores in storehouses ashore and in storerooms afloat, and in transit. (See Statement H).....	52,358.92
Midshipmen's store property. (See Statement I).....	3,447,462.28
Clothing and public property of the Marine Corps. (See Statement L).....	55,256.52
Medical stores in naval medical supply depots, Brooklyn, N. Y., Mare Island, Cal., and Canscao, P. I.....	3,056,489.05
Medical stores in naval medical supply depots, Brooklyn, N. Y., Mare Island, Cal., and Canscao, P. I.....	148,641.20
Total.....	147,522,778.58

REPORT OF THE SURGEON-GENERAL, UNITED STATES NAVY.

DEPARTMENT OF THE NAVY,
BUREAU OF MEDICINE AND SURGERY,
Washington, D. C., August 23, 1910.

SIR: Conformably to the instructions contained in the department's letter of July 28, 1910, the following annual report is submitted to cover the operations of the Bureau of Medicine and Surgery for the fiscal year ending June 30, 1910, and the health and sanitation of the Navy and Marine Corps for the calendar year 1909. Estimates for the regular annual appropriations for the fiscal year 1912 and a report of the condition of the hospital fund on June 30, 1910, are included.

For purposes of familiar reference and ready comparison with reports of former years, the sequence of subjects considered has been varied as little as possible. Without reverting to the custom of publishing annual reports in full with more or less editing, it has seemed proper to quote the words of observers who have had first-hand consideration of many special problems, in order that nothing may be lost by translating their ideas into expression by the bureau.

The comprehensive arguments favoring such legislation as has still failed of enactment have not been reiterated for the reason that they have all received the earnest support of the department and the bureau is sanguine that they will ultimately receive the consideration which their relative importance justifies.

In connection with the statistical tables, which have been slightly amplified this year, the bureau desires to emphasize the fact that its greatest present need is for a second statistical clerk, to be trained in the interpretation and correlating of returns, in order to correct and account for the many discrepancies which have long since been recognized but unavoidably allowed to remain unadjusted during the past ten years of the service's expansion through the lack of sufficient clerical force. The one clerk who has for many years compared and combined the statistical reports of the sick was hardly sufficient when the personnel, ships, and stations aggregated one-fifth their present number, and this division of the bureau has been additionally handicapped through the illness of another clerk, part of whose duties have devolved upon this statistical clerk.

Attention is invited to the closing page of last year's report, which argues the authorization of an additional clerk. The bureau feels justified by the few results of the new classification of distribution

of disease in the personnel already attained in predicting the solution of many sanitary problems and consequent reduction of preventable affections if this need is promptly filled.

It is recommended that the bureau be freely consulted in planning for prospective cruises and expeditions, in order that it may give the department timely advice as to the sanitary features of these military movements and make proper provision for the care of the sick and wounded, as would undoubtedly be done in actual warfare.

So far as cruises, expeditions, and the activities of service could be expected to influence sanitation and the movement of disease and injury, the year 1909 in the navy might be considered to have approximated to an unusual degree the "average" or "normal" year.

The combined statistical tables for disease, injuries, invalidings from the service, and deaths for 1909 indicate a generally diminished damage ratio as compared with that of the previous year and the average of the previous ten years. The death rate of 5 per thousand is lower than has ever been previously recorded for the navy. That this improvement is not merely apparent on account of the separation of the sick days at Las Animas is shown by the fact that, if they are included for purposes of just comparison, the total admission ratio dropped from 725.36 for 1908 to 698.25, the ratio of daily average of patients from 29.10 to 28.52, the average number of sick days for each individual from 10.66 to 10.41, the ratio of total discharges from disability from 35.49 to 30.59, and the death rate from 5.76 to 5.002.

The total damage for disease alone in percentage of sick was 3.952, which, when compared with Medical Inspector Gatewood's ten-year tables, is found to be lower than for any year since the Spanish-American war. The grand total damage in percentage of sick for 1909 was 4.619 as compared with 5.218, the average computed in the above-mentioned ten-year tables.

That these ratios should continue to fall and gradually approach the minimum compatible with the service's inherent cosmopolitan environment is to be expected largely from the awakened sense of sanitary responsibility in the communities with which the personnel must come in contact. The results may also be especially attributed to the increasingly recognized functions of the medical department to prevent the occurrence of disability rather than to await its inception to attempt to effect the cure. The position of the sanitarians of the fleet is unmistakably advancing.

In general, from year to year the total damage from disease and injury appears proportionate to the increasing personnel and this feeling that conditions approximate the normal may blind us in certain instances to habitual and seemingly unnecessary losses. This seems particularly applicable to the larger number of drownings recorded each year, and while special diseases and accidents are discussed in the usual section, the means of prevention are in this case without the province of the medical department, yet of sufficient importance to merit early and special mention. It would appear that one of the first requirements to be insisted upon after enlistment of the recruit or appointment of the midshipman, commissioned or warrant officer should be the demonstrated ability to swim a substantial distance, say, 300 yards, and to sustain the head above water for fifteen minutes in the presence of a light breeze. An endur-

ance and confidence such as will hardly be attained in a small tank would undoubtedly contribute to the saving of a considerable number of lives.

ESTIMATES.

Following the policy adopted by the bureau and approved by the department several years ago no estimates for appropriations by Congress for the construction or repair of naval hospitals have been submitted, and until other provision is made all expenses in connection with naval hospitals for new construction, enlargements, and necessary repairs will be provided from the Naval Hospital Fund. No appropriation under the title "Repairs, Medicine and Surgery" was made for the current fiscal year ending June 30, 1911, and no request has been made on Congress for an appropriation under that title for the fiscal year ending June 30, 1912.

Under the appropriation "Medical Department" an increase has been recommended from \$315,000 for the fiscal year 1911 to \$350,000 for the fiscal year 1912. The increase so recommended is greater than that recommended in the estimates of preceding fiscal years as the appropriations under this title for the fiscal years 1908, 1909, and 1910 have each required deficiency appropriations of \$36,000, \$17,000, and \$40,000, respectively.

Under the appropriation "Contingent" an increase has been recommended from \$76,500 for the fiscal year 1911 to \$79,000 for the fiscal year 1912, and provision has been made in the text of the appropriation covering the necessary repairs at naval medical supply depots, the elimination of the appropriation "Repairs, Medicine and Surgery," leaving no specific provision for this work.

Under the appropriation "Transportation of Remains" an increase has been recommended from \$10,000 for the fiscal year 1911 to \$13,000 for the fiscal year 1912. This appropriation, formerly \$15,000, was reduced by recommendation of the bureau in the fiscal year 1906 to \$10,000. The latter amount has been found insufficient during the past two years, and the increase of \$3,000 has been recommended to meet the increased expenses due to the larger naval personnel. This beneficent appropriation enables the department to bring home the remains of their dead to bereaved parents and widows too poor themselves to undertake the expense.

The Naval Hospital Fund was created, without appropriation, by an act establishing naval hospitals approved February 26, 1811. It draws its revenues from the naval service and not from appropriations by Congress. Section 4810 of the Revised Statutes authorizes the Secretary of the Navy to procure at suitable places sites for naval hospitals, and to erect necessary buildings and additions to buildings when the funds permit and circumstances require. During the past several years both of the conditions imposed by this statute have existed and new naval hospitals are being constructed at Portsmouth, N. H., Chelsea, Mass., and Newport, R. I., from the Naval Hospital Fund and without cost to the United States. At Portsmouth and at Chelsea the new buildings have been placed on parts of the naval reservation already in possession of the department, but at Newport a new site on the mainland opposite the naval station was secured by purchase, and condemnation proceedings have just been instituted for an additional plat of about $4\frac{1}{2}$ acres. Unless the incre-

ment of the Naval Hospital Fund should be further diverted to other purposes than those contemplated in the laws creating it, it will probably be sufficient for the maintenance of an adequate hospital service in the navy without expense to the United States, but the bureau has to strongly recommend that the provision made in the naval act for the fiscal year 1910, approved March 3, 1909, diverting from the Naval Hospital Fund moneys for the transportation to their homes or places of enlistment of naval prisoners and for the purchase of suitable civilian clothing for the same be repealed, and that these expenses be made a charge against the United States under the appropriation "Transportation, Bureau of Navigation."

NAVAL HOSPITAL FUND.

The condition of this fund is as follows, viz:

Balance on hand July 1, 1909.....	\$376, 686. 32
Transferred to credit since July 1, 1909.....	895, 983. 65
Total.....	1, 272, 669. 97
Expended since July 1, 1909.....	1, 258, 779. 21
Balance on hand June 30, 1910.....	13, 890. 76

The average cost of maintenance of naval as compared with civil hospitals for fiscal year 1909 appears as follows:

Average cost per day at naval hospitals without salaries.....	\$1. 49
Average cost per day at naval hospitals with salaries.....	2. 32
Average cost per day at civil hospitals of the poorer class.....	1. 17
Average cost per day at civil hospitals of the best class.....	2. 50 to 3
Average daily cost for subsistence, naval hospitals.....	. 478
Average daily cost for subsistence, civil hospitals.....	. 35

A general analysis of the detailed figures for fiscal year 1909 showed that the daily cost for uncooked food is about one-third higher in naval than in civil hospitals, which is probably to be accounted for by the fact that naval hospitals have a much higher percentage of full-diet patients (convalescents). It appears, however, that the cost of maintenance of naval hospitals is considerably less than obtains in civil institutions, they having a considerably smaller number of employees at lower wages, and supplies, being obtained in large contract lots, are relatively cheaper. This lower maintenance figure, therefore, in a measure compensates for the higher subsistence figure and brings the daily cost of the two classes of institutions to within a small general variation. Where comparison is practicable by the similarity of other conditions, economy and efficiency seem more in evidence at those hospitals where pharmacists have been in charge of the commissary department.

Statement of cost of maintenance of United States naval hospitals for the fiscal year 1910.

	Portsmouth N. H.	Chelsea, Mass.	Newport, R. I.	New York, N. Y.	Philadel- phia, Pa.	Washing- ton, D. C.
Provisions.....	\$8,937.67	\$22,958.02	\$17,453.70	\$31,151.83	\$14,129.75	\$13,122.88
Ambulance service.....	114.00	1,131.72	736.78	848.68	874.30	
Fuel, light, water.....	2,231.45	8,603.79	5,765.02	12,641.13	3,180.84	1,724.40
Medical supplies.....	1,603.94	6,741.89	4,816.44	9,032.92	3,578.98	651.88
Miscellaneous supplies.....	1,232.11	5,224.75	4,682.15	12,456.32	5,419.73	1,371.80
Total cost of maintenance.....	14,119.17	44,660.17	33,454.09	66,130.88	27,183.66	16,870.70
Sick days.....	7,923	36,792	25,292	36,811	11,127	2,380
Subsistence days, Hospital Corps.....	3,463	11,050	8,194	12,068	6,325	18,250
Subsistence days, Nurse Corps.....						
Subsistence days, civilian employees.....	2,190	5,557	3,786	10,983	4,800	2,909
Subsistence days, marine guard.....				288	7	
Total number of days subsistence.....	13,576	53,399	37,272	60,750	22,309	23,548
Average cost per diem for maintenance.....	\$1.04	\$0.83634	\$0.89756	\$1.098	\$1.210	\$0.716
Average cost per diem for subsistence.....	.65	.42963	.46827	.511	.633	.557

	Naval Medical School Hospital, Washing- ton, D. C.	Annapo- lis, Md.	Norfolk, Va.	Port Royal, S. C.	Pen- sacola, Fla.	San Juan, P. R.
Provisions.....	\$28,260.14	\$15,140.91	\$40,686.03	\$3,298.98	\$2,843.40	\$5,485.61
Ambulance service.....	6,458.28	548.10	6,555.02		271.40	622.07
Fuel, light, water.....	8,320.21	4,216.57	9,540.26	490.88	475.01	1,026.44
Medical supplies.....	5,733.09	5,962.75	13,268.89	2,138.92	156.73	633.10
Miscellaneous supplies.....	3,385.60	2,211.29	9,936.12	791.66	326.77	303.92
Total cost of maintenance.....	52,157.42	28,079.02	79,926.32	6,720.44	4,073.31	8,051.14
Sick days.....	25,815	10,116	52,570	3,072	982	3,054
Subsistence days, Hospital Corps.....	12,905	6,999	18,464	1,664	1,785	2,605
Subsistence days, Nurse Corps.....						
Subsistence days, civilian employees.....	4,581	3,236	15,118	1,403	1,825	1,456
Subsistence days, marine guard.....	324		7,520			
Total number of days subsistence.....	43,625	20,351	93,681	6,140	4,593	7,116
Average cost per diem for maintenance.....	\$1.197	\$1.379	\$0.8531	\$1.09	\$0.8868	\$1.131
Average cost per diem for subsistence.....	.647	.743	.4343	.53	.619	.7709

	Las Animas, Colo.	Mare Island, Cal.	Puget Sound, Wash.	Sitka, Alaska.	Canaan, P. I.	Yoko- hama, Japan.
Provisions.....	\$72,359.40	\$37,084.41	\$10,947.93	\$1,171.67	\$21,048.87	\$6,738.72
Ambulance service.....	2,826.64	1,479.20			963.64	31.49
Fuel, light, water.....	13,337.78	10,763.10	1,078.06	885.50	11,574.66	3,402.23
Medical supplies.....	2,981.12	10,614.91	5,671.07	867.74	14,888.62	1,124.91
Miscellaneous supplies.....	2,707.89	9,946.78	3,460.45	373.45	10,552.34	1,448.09
Total cost of maintenance.....	94,212.83	69,888.40	21,187.51	3,298.36	59,038.13	12,745.44
Sick days.....	64,310	55,492	16,686	422	23,819	4,706
Subsistence days, Hospital Corps.....	10,059	16,102	4,568	700	13,967	2,167
Subsistence days, Nurse Corps.....		228				
Subsistence days, civilian employees.....	19,947	8,006	897	365	4,812	231
Subsistence days, marine guard.....	6,304					4,220
Total number of days subsistence.....	100,620	79,838	22,151	1,487	42,598	11,324
Average cost per diem for maintenance.....	\$0.9363	\$0.864	\$0.95	\$2.09	\$1.38	\$1.125
Average cost per diem for subsistence.....	.7191	.464	.49	.70	.494	.585

MEDICAL CORPS.

At the end of the fiscal year 1908, after the last of the six annual increases of 25 assistant surgeons became available by legislation, there were 53 vacancies in the regular corps. Since this time little progress has been made toward filling the corps for the evident reason that admission was, by departmental order on October 8, 1908, restricted to the grade of acting assistant surgeon, for which grade the compensation is but about one-half the pay and allowances provided for entrants to the army as first lieutenants in the Medical Reserve Corps. One year ago there were still 51 vacancies, and at the end of the fiscal year 1910 the number had been reduced only to 45. The failure of Congress to enact any one of the four measures which provided for equalizing the compensation of acting assistant and assistant surgeons made it imperative for the bureau to recommend the direct appointment of assistant surgeons from civil life and the elimination of the prescribed probationary period, which was authorized by the department on August 19. Instruction at the Naval Medical School will, however, of course be pursued, but following instead of preceding appointment to the regular corps. The delay which this practice has entailed in commissioning assistant surgeons will operate to the comparative disadvantage of these officers, who have averaged 27 years of age while attending the school. At the same time line officers receive their first commissions at the age of 24, and doubtless will soon receive them at the age of 22. It is believed that with the removal of this disadvantage and the assurance of promotion after definite periods of service in each grade, somewhat as contemplated in the proposed personnel act, better qualified applicants for appointment will respond in greater numbers. The same frailties of human nature and need for contentment on the part of officers of the Medical Corps are undoubtedly factors of importance to military efficiency, and the attainment of the same rank and pay at approximately the same ages as do officers of other corps is naturally sought by those who feel that their duties involve quite as much responsibility in their work as physicians and sanitarians.

The desirability of requiring at least one year's hospital service prior to appointment has, in common with other means of raising the standard, long been recognized, but it has not seemed wise to urge such requirement until recently, when it was authorized by the department in connection with the direct appointment of assistant surgeons. The extreme shortage of medical officers has been a source of much embarrassment during the past year. Efforts to have all examined for promotion as soon as due have been unavailing in many instances from lack of officers to relieve them from duty at sea or on foreign station. The Asiatic Station, as well as numerous shore stations beyond the seas, gradually demand an increased medical personnel, so that those sent out do not always relieve others who are due for examination. Officers are doubtless unanimous in believing that all should be examined, at least physically, by a legally competent board as soon as due for promotion, and the above considerations, together with the necessity of constantly having in mind the insufficiency of funds available for mileage, have made it imperative to establish additional examining boards at Mare Island and at Canacao. Certain hospitals and shore stations have almost habitu-

ally had an insufficient number of medical officers, and the service of eight passed assistant surgeons could hardly be spared for attendance for two months upon the spring course of instruction at the Naval Medical School. Few have been available for service at marine recruiting stations. The bureau has been unable to recommend the assignment of officers to many special duties which would enhance their military efficiency. The considerable number of officers required for service on hospital ships, isolated foreign stations with very small naval complement but large native populations, with marine detachments drawn in small groups from stations where they would have required no additional medical officer, at navy-yards in connection with the examination of sick or injured civil employees seeking the benefits of the indemnity act, and on duties not always strictly naval shows the possible fallacy of adhering perhaps too closely in years to come to a percentage based upon tonnage or upon the number of officers in the line. One year ago, and independently of the 420 medical officers which are contemplated for 1915 by the proposed personnel act, having in view solely the needs of existing and projected ships, stations, and hospitals, it was computed that 425 medical officers would be required. This number left no margin for those who might be sick, traveling from one duty to another, or on leave. The multiplication of duties for medical officers on shore stations must reduce the proportion of sea duty for a considerable number of officers, and the bureau has already begun to favor the reduction of cruises of surgeons to approximately two years, as officers in this grade are assumed to be in most need of the professional recuperation which shore duty usually accomplishes.

It has long been recognized that the paramount duty of medical officers at sea during peace times pertains to sanitation and the practice of preventive medicine, which do much to add to the fighting efficiency of the fleet, at the same time making preparations and planning for the diametrically opposite conditions that would confront these officers during actual warfare. In order that medical officers may be successful in combating and preventing disease, they must have duty at naval hospitals and in civil communities, where these diseases can be studied and the necessary measures scientifically planned. In these institutions, too, a knowledge of operative surgery, such as would be demanded of them during and after battle, can also be attained. Specialism along certain lines has been encouraged, and great satisfaction has followed the proficiency attained by officers in these special branches of medicine and surgery.

The shortage of officers has necessitated frequent transfers to duty where needs have been temporarily urgent, and the bureau has been enabled to recommend but little leave of absence. There has been a great and insistent demand upon the part of junior officers for professional duty in hospitals in preference to recruiting and other duties which they have not yet learned to recognize as pertaining to the profession of a medical officer in contradistinction to that of a physician in civil life. It seems to require a considerable number of years for officers to appreciate that a medical officer's rightful duties are manifold, and that administrative, executive, and recruiting activities are quite as much functions of the medical corps as are those of the sick room and clinical laboratory. The bureau's efforts to have as many officers as possible obtain hospital duty somewhat counter-

acts its policy of promoting contentment and reducing mileage by recommending as few transfers as possible.

In this connection it will be the aim of the present administration to develop specialists in hospital work from among those who exhibit particular adaptability in this direction; indeed, a continuance is contemplated of the encouragement to specialize in directions which the best interests of the service seem to dictate, but only with the distinct understanding that the acquirement of a specialty shall interfere in no way with the performance of any regular duty to which the officer may be assigned, nor prevent him from taking his turn at sea duty when the interests of the service demand. It has been well said that two groups of medical officers should have hospital duty, those whose earlier hospital experience will assure successful administration and those who still lack the experience to properly qualify them for the care of the sick; the same may be said of routine clinical laboratory work, but not so essentially of recruiting, the study of tropical medicine on foreign stations, and the higher specialties.

Throughout the last fiscal year candidates for admission to the Medical Corps were examined only for the grade of acting assistant surgeon with the exception of one ex-officer of that grade who failed to qualify for appointment as assistant surgeon after the course of instruction last year, and again failed this year after being given another opportunity. Of the 19 acting assistant surgeons, comprising the last winter class under instruction, 18 passed the final examination and were commissioned assistant surgeons, and one failed physically, causing the revocation of his acting appointment. Asst. Surg. A. B. Davidson was the honor man of the class, having attained a mark of 835 on his final examination. During the calendar year 1909 there were but 36 applicants for admission to the Medical Corps examined in Washington as compared with 90 during 1908.

In examinations for promotion to the next higher grade in the regular service, one surgeon failed physically after twenty-four years' active service, and was retired without the benefit of the promotion which an officer of the Army or Marine Corps would have received under the same circumstances. One passed assistant surgeon failed professionally, and one assistant surgeon who failed to qualify physically last year remains yet to be examined. Examination for the lower grades is theoretically designed to effect an early elimination of the unfit, but practically it results in a strain of questionable justification; the worry incident to examinations of all except the few who can contemplate the probabilities of outcome philosophically, is a source of considerable loss of efficiency to the service; it is common experience that the preparation for a largely theoretical examination interferes with the full performance of an interest in the officer's regular work, either on board ships or in hospitals, the desirability of a more practical test and judgment as to fitness for promotion is appreciated, and a change is likely to be advocated when a sufficient number of officers become available to render it feasible. Briefly, it has been proposed to have boards as recently organized at a large naval hospital on the Atlantic and Pacific coasts and Asiatic Station, but with one of the members a medical inspector, attached to the station, practically for various board duties only, who would devote much of his time to the examination of candidates for appointment and promotion; from two to five months, as may prove practicable, prior to the date upon which pro-

motion is due, medical officers would be ordered to one of these hospitals for duty, and the major part of his examination would be the supervision and observation of the various routine duties to which he would be assigned; this would afford abundant opportunity to determine a candidate's general educational and professional qualifications, his ability to perform executive duty, handle enlisted men, look out for property and equipment, perform such surgical operations as may be properly entrusted to him, conduct the routine investigations in the laboratory, perform autopsies, undertake elementary but routine examinations of eyes and other special parts, and to prepare a set of the various returns and papers on such interesting cases as may be available with full access to text-books and medical journals.

Periodicals and text-books have been as liberally supplied to the officers of ships, stations, and hospitals as funds have allowed, to the end that they may be kept informed of medical progress, but it is assumed that officers will continue to subscribe for such special journals and books as their interest and judgment dictate. After such fairly constant observation in actual practical work the members of a board would be in much better position to certify as to the candidates' real fitness for the service, and no man of good practical attainments would have cause for apprehension over the outcome of his examination. Moreover, the occasional semi-genius with unusual capacity for memorizing text-book knowledge would be prompted to seek rather than avoid clinical work. All of the foregoing remarks in this section are pertinent to making duty in the Medical Corps sufficiently attractive to induce young graduates to apply for appointments.

ACTING ASSISTANT SURGEONS.

Under the conditions of low pay and no allowances, it has been impossible to obtain the number (25) allowed by law, since appointment to the service was restricted to this probationary grade, and practically its continuance shows few advantages. There has been a marked tendency for applicants of but mediocre attainments to make a passing mark of 650, while the better qualified ones who would readily achieve the mark of 750 (required for admission to the grade of assistant surgeon) have been deterred from the fact that they must render from six to eighteen months' service before their careers in the regular corps can begin.

It has not been deemed advisable to seek authority for requiring from appointees a pledge to serve for any stated period after receiving the course of instruction at the Naval Medical School; leniency in this matter has not been abused, and such a pledge might be expected to deter many desirable physicians from entering the service; after being assured that an assistant surgeon has definitely made up his mind to leave the service, even if he has performed but a few months of duty at sea, it would seem best, if practicable, to relieve him, for an officer retained against his will is not likely to render whole-hearted service.

If there is any merit in the probationary period, the establishment of a Naval Medical Reserve Corps as recommended by the department should make service in this grade satisfactory to such as qualify on the four fundamental branches but fail to make the required mark of 750, and yet who show almost certain promise of qualifying after

receiving the special instruction with other appointees. The Government would incur no expense other than mileage and pay while complying with orders to the Naval Medical School and in case of eventual failure to qualify, there would be no revocation of appointment to stigmatize a well-meaning applicant in his home clientele; the appointment would be continued and his services would be available and of undoubted value in time of war.

Table showing applicants examined for appointment as acting assistant surgeon in the navy from July 1, 1909, to June 30, 1910, place of examination, and result.

Where examined.	Total number examined.	Qualified.	Rejected physically.	Rejected professionally.	Withdrawn.
Washington, D. C.....	28	3	11	8	6
Mare Island, Cal.....	4	.....	3	.....	1
Philadelphia, Pa.....	21	7	6	1	7
New York, N. Y.....	10	3	4	3	.....
Chelsea, Mass.....	10	2	1	.....	7
Total.....	73	15	25	12	21

NAVAL MEDICAL SCHOOL.

The work of this institution has undoubtedly continued to increase its effectiveness during the last year, notwithstanding the fact that the classes under instruction have been smaller. The winter class numbered 20, as compared with 39 for the previous year, and the spring class 8, as compared with 21 for 1909. It is hoped that the 45 vacancies in the corps may be filled within the next two or three years, so that the classes may again tax the capacity of the school. It might then be possible to assign regularly every officer in the grades of surgeon and passed assistant surgeon to a class of instruction every six years. Assistant surgeons, having had the instruction upon appointment, should be prepared, without any further course, for examination for promotion immediately upon completion of their first cruise. It is aimed to gradually develop a sufficient number of qualified instructors so that no individual officer's sea duty shall be interfered with and that opportunities shall meet the ambitions of a greater number. To supplement the valuable courses which Doctors Stiles and White have been giving since the present curriculum was established in 1902 and because the increasing demands of their routine work has precluded so much attention to this gratuitous instruction, two junior officers have been detailed as assistant instructors in medical zoology and psychiatry. A prospectus of courses has recently been compiled for publication for exchange with institutions and workers associated in similar activities.

All officers below the grade of medical inspector, with the exception of 27 surgeons and 1 passed assistant surgeon, have at some time had a course of naval medical and laboratory instruction, either at Brooklyn or Washington, and of the former grade all but 44 have received the benefits of the course at the Naval Medical School during the past eight years.

The laboratory work has been well systematized both for purposes of instruction and for the examination of material received from the naval personnel under treatment at hospitals, ships, and stations in

and outside of Washington. Research work has been practically confined to the perfection of tests practicable for ships and distant stations lacking extensive equipment, the results of which have been published from time to time as original work in the Naval Medical Bulletin.

Owing to the lack of a teaching force independent of those whose energies have been fully occupied at the Naval Medical School Hospital, the latter institution has been a "school hospital" only in name, but during the last year a beginning has been made toward availing the school of the considerable clinical advantages which the hospital should afford. Classes for the hospital corps, stewards, female nurses, and the presence of the hospital corps training school should greatly enlarge the teaching scope of the institution.

One of the greatest present needs of the school is a collection of specimens for the teaching of gross pathology, and appeal has already been made to medical officers to forward material.

A large amount of additional work has been performed by the instructors in the hospital and dispensary, on various boards, reviewing foreign and domestic periodicals for the "Bulletin," furnishing manuscript for text-books and bureau publications, and giving lectures on tropical medicine and kindred subjects at the medical schools of New York, Philadelphia, Washington, and Michigan. One instructor has been detailed for attendance at the Naval War College and one for additional work at the Government Hospital for the Insane.

EDUCATIONAL ADVANTAGES OUTSIDE REGULAR NAVY WORK.

Medical officers have been enabled to undertake very interesting work, either by departmental designation or upon their own initiative, in connection with their routine duties; those at the Naval Medical School have profited by the proximity of the hygienic laboratory of the Public Health and Marine-Hospital Service, whose officers have always heartily cooperated by helpful suggestions in problems which are of common interest to the two services. The New York Post-Graduate Medical School has continued to admit officers with proper credentials to certain of its courses. As many officers as could possibly be spared have been permitted to prosecute studies in the medical centers of Europe while returning from the Asiatic Station, defraying their own additional travel and tuition expenses.

The great medical schools of this country have almost invariably extended courtesies to such officers as have been able to pursue studies in connection with their regular work. A number have familiarized themselves with eye affections while on recruiting duty by attending early morning and evening clinics, and thereby attained proficiency which should materially enhance the value of their services to the naval personnel in their future assignments. There is little danger of too many becoming adept in this line of work, although there are other fields, such as skin and dental diseases, to which special attention might be profitably directed. Medical practice in tropical countries continues to add in some instances notably to the advance in knowledge of a branch of medicine which is rapidly developing recognition of its importance in this country. As a typical instance, the medical officers on duty in Samoa have demonstrated the high

prevalence of hookworm among the native population and received the vigorous support of the governor, who promptly established a board of health and promulgated its regulations for the eradication of this infection. The medical officer in command of the Naval Hospital, Canacao, P. I., is an associate in tropical medicine at the Philippine Islands Medical School, and the senior medical officer at Olongapo, P. I., has been appointed presidente de sandidad for that city.

One officer has particularly directed attention to the desirability of surgeons availing themselves of the opportunity when crossing the continent of visiting for a week the Mayo clinics at Rochester, Minn. The work undertaken at the Naval Academy to determine developmental age of the midshipmen by the Rotch system of radiographic study of the bones of the wrist has been continued, with conclusions of considerable value to the service and great assistance in the study of the general subject. The fact that the interpretation of the radiographs in many notable instances coincide with the conclusions reached by the medical officer in charge of physical training would indicate that by this means physical strain might be anticipated and thereby guarded against. The medical officers in charge of the above investigations have recently made an exhaustive study of glasses to determine the tint and composition which will give the most effective visual stimulation and at the same time exclude the maximum of chemical or irritating rays. Similarly valuable investigation led to the solution of the problem of illumination of study rooms at the Naval Academy, the details of which were published in the Naval Medical Bulletin of last July.

Medical officers on the *Maryland* and *New York* have improvised X ray apparatus which have given excellent results supplementing the work of pioneers in the service along these lines; much ingenuity has also been shown in the electric temperature control of incubators for the culture of germs for purposes of diagnosis and vaccine treatment.

The following congresses and conferences, with two exceptions, were attended during the last fiscal year by the representatives designated from the Medical Corps of the Navy:

(a) International Commission for the Revision of the International Classification of Diseases and Causes of Death, Paris, July 1-3, 1909. Surg. F. L. Pleadwell.

(b) Eighth International Tuberculosis Conference, Stockholm, July 8-10, 1909. Medical Director J. C. Wise.

(c) Twelfth International Anti-Alcoholic Congress, London, July 18-24, 1909. Surg. F. L. Pleadwell.

(d) Second International Scientific Conference against Leprosy, Bergen, August 16-19, 1909. Medical Director J. C. Wise.

(e) American Pharmaceutical Association, Los Angeles, Cal., August 16-21, 1909. Pharmacist Oscar Ruge.

(f) Sixteenth International Medical Congress, Budapest, August 29-September 4, 1909. Medical Director J. C. Wise.

(g) Eighteenth Annual Meeting of Association of Military Surgeons of the United States, Washington, October 5-8, 1909. Medical Inspector L. W. Curtis and Surgs. G. A. Lung, M. F. Gates, and H. C. Holcomb.

(h) American Public Health Association, Richmond, Va., October 19-22, 1909. Surg. F. L. Pleadwell.

(i) Fourth International Sanitary Convention of American Republics, San Jose, Costa Rica, December 25, 1909-January 2, 1910. No delegate.

(j) International Medical Association of Mexico, Aguascalientes, Mexico, January 25-27, 1910. Surg. B. L. Wright.

(k) Special Conference on Medical Education and Legislation of American Medical Association, Chicago, Ill., February 28-March 2, 1910. Surg. L. L. von Wedekind.

(l) Third International Congress on Physiotherapy, Paris, March 29-April 2, 1910. No delegate.

(m) United States Pharmacopœial Convention, Washington, May 10-12, 1910. Medical Inspector H. G. Beyer, Surg. G. L. Angeny, and Pharmacist P. J. Waldner.

(n) California Pharmaceutical Association, San Francisco, May 17-21, 1910. Pharmacist Alrik Hammar.

(o) International American Congress of Medicine and Hygiene, and International Exposition of Hygiene, Buenos Aires, May 25, 1910. Surgs. F. C. Cook, M. K. Johnson, E. G. Parker, and G. F. Freeman.

(p) American Medical Association, St. Louis, June 7-10, 1910. Surg. J. C. Pryor and Passed Asst. Surg. W. H. Rennie.

(q) American Society of Tropical Medicine, St. Louis, June 11, 1910. Passed Asst. Surg. W. H. Rennie.

(r) American Public Health Association, Milwaukee, Wis., September 3-9, 1910. Surg. C. N. Fiske.

(s) American Hospital Association, St. Louis, Mo., September 20-23, 1910. Surg. A. W. Dunbar.

THE HOSPITAL CORPS.

Conditions in the Hospital Corps as regards numbers and effectiveness are practically the same as reported last year. The total number of men on July 1 was 1,111, divided as follows: Hospital stewards, 275; hospital apprentices, first class, 438, and hospital apprentices, 398. In general the work of the corps has been satisfactory, considering the limited experience which a large proportion has had in the peculiar duties involved in the care of the navy sick. The problem of the inexperienced man confronts this branch even more acutely than it does the service in general, and this retarding factor will not be corrected unless men who have been thoroughly trained can be induced to reenlist by the establishment of ratings for their advancement. The naval personnel measure now in Congress should remedy existing faults, and, as this legislation already has the department's earnest support, nothing remains but to await its enactment. The lack of suitable promotion for the hospital apprentice, first class, except to the rating of hospital steward, which means promotion from a third class to a chief petty officer, has resulted in a tendency on the part of medical officers to relax in the maintenance of a proper standard of professional fitness in this rating, the effect being that some hospital stewards are not as capable as they should be. An endeavor has been made to correct this tendency by requiring that all proceedings of examinations be forwarded to the bureau and by limiting promotions to fill vacancies only unless the man presents especially meritorious qualifications which warrant making an exception to the rule. Primarily hospital apprentices are detailed to hospitals for the purpose of gaining practical experience in the care of sick preliminary to service at sea, and their position therein is not to be considered as analogous to that of so-called "orderlies" in civil institutions.

The ever-increasing size of our ships, with a corresponding increase in the work thrown on the medical department and the introduction of venereal prophylactic measures, have all contributed toward a demand for more experienced men of this corps on board ship. The force is none too large and should be made up of trained men. Continued attention will be given to the matter of a proper interchange of duty whereby men will alternate more or less regularly between

sea and shore, and special care will be exercised to guard against unduly long periods of shore service with the resulting disinclination for duty on board ship and the development of a distaste for their proper naval professional duties.

It has been the policy heretofore to assign raw recruits to naval hospitals and if they showed any aptitude for their special work the picked ones, in limited numbers, were sent to the hospital corps training school for a five months' course. Those recruits looked upon as not qualified to take the course were either sent to sea or were continued at hospitals in attendance on the sick. The weeding out of undesirables was thus done at hospitals or at sea and only a limited number of hospital apprentices received the benefits of the course at the school. This method led to unsatisfactory conditions which it is proposed to remedy.

After enlistment in future hospital apprentices will go direct to the training station for apprentice seamen at Newport, Norfolk, and San Francisco, and will receive the same training in every detail that is given apprentice seamen, except that when apprentice seamen are drilling with guns or at target practice hospital apprentices will be given the hospital corps drill and first-aid instruction. The undesirable can be weeded out at these stations. The hospital corps men will go to the fleet with the apprentice seamen and will be assigned to the medical departments of the various ships and to the hospital ship. Their instruction will be continued at sea and will be in accordance with the needs of the service afloat. At the end of a year these men will be sent to the naval hospitals, New York, Norfolk, Mare Island, and Canacao.

At these hospitals they will receive practical training in the care of the sick in the wards—at the bedside under the guidance of the female nurse corps. When this instruction is completed, if they pass the required examinations, they are returned to the fleet advanced to the next higher rating. This plan will teach all hospital corps men how to take care of themselves, it will give all hospital corps men instruction in first aid and hospital corps drills, including stretcher work and the handling of disabled individuals before they go to the fleet. They will also have been drilled in setting up and in military formations. The instruction in their special field of work will be continuous and universal from this time until the expiration of enlistment. It will give to the service an able and efficient body of men.

It is gratifying to report that the department's plan of assigning a hospital steward to each of the large destroyers has been a success, and the experience so far indicates that these men are doing good work and have demonstrated their usefulness as a part of the complement. It is believed that a hospital apprentice, first class, should be assigned to each of the smaller torpedo crafts, which opinion seems to be generally shared by the commanding officers of these vessels.

Pharmacists: During the year embraced by this report there have been two promotions to this grade from the rating of hospital steward. The policy of exacting a high standard of professional ability will be maintained with a view to building up an energetic and thoroughly capable force of pharmacists who may ultimately be depended upon to do such laboratory work as may be needed in the examination of

foods and other chemical analyses, and the opportunity is here taken to state that in the future the professional exactions for promotion to this grade will keep pace with the general advancement of the work of the Medical Department.

HOSPITAL CORPS TRAINING SCHOOL.

During the year ending June 30, 1910, two classes were assembled at the Hospital Corps Training School; the eighteenth class on September 1 with 53 men and the nineteenth class on March 1 with 48 men. With the exception of a few who were eliminated on account of undesirability or inaptitude all were graduated and distributed to general service. The extension of the course to five months did not affect the character of the curriculum other than the addition of an elementary course in practical and theoretical pharmacy.

The change in methods of training recruits of the Hospital Corps, outlined in the preceding section, will obviate the necessity for maintenance of a separate establishment in Washington for this purpose when the present class graduates next January. In connection with the more advanced training for the Hospital Corps and to prepare them for advancement to the warrant grade, it is proposed to assemble at the Naval Medical School a small number of selected hospital stewards for instruction in chemistry and laboratory methods who in addition to their periods of instruction may serve as masters at arms.

NURSE CORPS (FEMALE)

The recruiting of women nurses has been very slow on account of efforts to obtain only those best qualified; the enactment of legislation for increased pay and allowances for the army nurses, which also applies to those of the navy, should render the position more attractive and ultimately bring the number up to the 200 needed. At the end of the fiscal year there were serving but 48 nurses and 5 chief nurses at the naval hospitals at Washington, New York, Norfolk, Mare Island and Annapolis. There have been but two resignations and no discharges. Up to the present all appointees have been first assigned to duty at the Naval Medical School Hospital for special instruction in matters peculiar to the service, but eventually another class will doubtless be formed on the Pacific coast. It has been the policy to assign a small number to each hospital to supplement but not supplant the work of hospital apprentices, who will profit by the methods of the women nurses and their wide professional experience; the services of hospital stewards will not be required to supervise nursing in the wards of hospitals, but only for office, sanitary, and disciplinary duties. It is not contemplated to assign women nurses to duty on hospital ships.

The medical officer in command of the Naval Medical School Hospital, reports as follows:

The female nurse corps, which was organized and began its career in the navy in October, 1908, with this hospital as its central station, has been a gratifying success, and has amply proved that it was needed and that it has without doubt come to be a permanent adjunct to the Medical Department. Their arrival here speedily brought about a most gratifying improvement in the personal care of the sick, the preparation

and serving of diet, and in the hundred ways in which their presence and ministrations contribute to the daily cheerfulness and welfare of the sick.

It is also gratifying to observe the great benefit to the hospital apprentices who serve in the hospital under the daily object lesson instruction from the trained nurses. These young men thus acquire a practical training which they have never been able to do before, and they also learn gentler methods, more composed and quieter bearing at the bedside, and they will take some of this to sea with them, in no small degree raising and refining the standard of nursing on board ship.

DENTISTS FOR THE NAVY.

The department having recommended to Congress the enactment of legislation to provide for the appointment of dental surgeons to correspond in rank with the lower and intermediate grades in the Medical Corps and to be attached to the Medical Department with remarkably liberal and adequate provisions, and argument in favor of the establishment of a dental corps having been so fully covered in former reports, record is here simply made of dental work accomplished at certain stations in most instances by improvisation during the year 1909. These reports may be considered as cumulative evidence of the need already indicated.

At the Naval Academy, among 1,013 midshipmen, the following work was reported:

Visits.....	3, 221
Alveolar abscess.....cases.....	21
Bridges: (a) New, 13; (b) reset, 1.....	14
Crowns: (a) Gold, 72; (b) porcelain, 24; (c) reset, 12.....	108
Extracted: (a) Teeth, 29; (b) roots, 3.....	32
Fillings: (a) Gold, 172; (b) amalgam, 1,014; (c) cement, 138; (d) gutta-percha, 39; (e) porcelain, 85; (f) gold inlays, 41.....	1, 489
Gingivitis: (a) Marginal, 6; (b) ulcerative.....cases.....	6
Hypersensitive dentine.....do.....	3
Necrosis: (a) Alveolar process, 1; (b) jaws.....do.....	1
Pericementitis, or periodontitis, or inflammation of the peridental membrane.....cases.....	41
Pulpitis.....do.....	121
Pulps devitalized.....do.....	35
Pulps removed.....do.....	42
Pulpless teeth treated and filled.....do.....	69
Pyorrhea alveolaris.....do.....	3
Salivary deposits removed, and teeth polished.....do.....	73
Painful eruption of third molars (wisdom teeth).....do.....	25
Treatment and correction of irregularities of teeth.....do.....	9
Total number of operations.....	2, 092
Number of patients (not counting visits for examination and consultation)....	468
Average number of operations.....	4. 4

The fleet surgeon of the Pacific Fleet reports as follows:

Much dental work has been done on the ships of the squadron. For example, on the *Tennessee* from April 22 to August 28, 1909, 282 teeth were crowned and bridged, 108 devitalized, and 27 extracted; there were 219 gold fillings, 412 amalgam fillings, and 67 cement fillings. This work cost the crew \$2,960 and represents only a part of what was desired, as a dentist could have been kept very busy for an additional number of months, but was unable to continue owing to the departure of the ship. The necessity for dental work on ships has long been recognized, and it is the opinion that the more closely this question is examined the more apparent the necessity becomes.

The fleet surgeon of the Asiatic Fleet made the following comment:

The need of a dental surgeon at Olongapo and in the squadron is urgent. At the former place the hospital steward attached to the *Relief* did good work, but his enlistment having expired he was transferred to the United States, and should be replaced

by another. The large number of officers and their families, the large enlisted force, and the remoteness of this station render the necessity for a dentist self-evident. Before starting on the summer cruise a civilian dentist in Cavite was given permission to accompany the squadron. He was attached to the flagship, was quartered and messed with the junior officers, a convenient working place was assigned him on the gun deck, and he did excellent work. After the return of the squadron to Cavite the permission granted him was extended, and after the flagship left for Yokohama he went on board other ships remaining at Cavite, to complete necessary work. The following is a statement of work done by him while north, and he states that he has not been able to attend to the entire personnel:

Cases treated.....	355
Fillings (plastic, gold, and inlays).....	1,004
Crowns (gold and porcelain).....	204
Bridges.....	67
Extractions.....	93
Polishing.....	75
Alveolar abscesses treated.....	47
Dental pulps or nerves extirpated.....	116

His presence on board ship obviated the necessity of special arrangements for sending men ashore, special-money requisitions, solved the problem of "classed" men, reduced interference with ship's work and drills to a minimum, and induced many men to obtain dental aid who otherwise would not have done so.

The report from the Naval Training Station, Narragansett Bay, states:

As formerly, the care of cases presenting themselves for emergency and repair treatment take up nearly the entire time of the hospital steward doing dental duty; the routine inspection of the teeth of all apprentice seamen can not be carried out as fully as it should be. A summary of the work done during the year follows:

Teeth crowned.....	809
Teeth filled.....	625
Teeth cleaned.....	580
Teeth extracted.....	144
Teeth repaired.....	13

The senior medical officer of the *Minnesota*, whose junior medical officer is fortunately a graduate in dentistry, reported:

Excellent work in the dental department, especially in temporary preservation of the teeth, has been done by Asst. Surg. L. W. Johnson. In addition to the usual dental outfit supplied, dental supplies on requisition and the use of his own instruments have enabled him to do considerable work in this line, not only on this ship, but on many cases sent from other ships. He has used ethyl chlorid by the closed method as a general anæsthetic not only for the extraction of hopelessly decayed teeth, but in opening abscesses, the breaking up of adhesions around joints, and in other short minor operations. No untoward symptoms resulted from the administration of ethyl chlorid in any case. In the navy doubtless many teeth that can be temporarily filled are sacrificed for the relief of toothache.

From the navy-yard, Philadelphia, the report stated:

In the absence of the provision for dental surgeons for the navy a civilian dentist has continued to work at the barracks at stated hours. At my request he has submitted the following summary of work done during the year at the barracks. He also makes the pertinent suggestion that some suitable place should be arranged for dental work in the new barracks. At present he is obliged to work in the wash room, which is unsuitable.

Gold fillings.....	147
Silver amalgam fillings.....	397
Bridges (all kinds).....	27
Gold crowns.....	43
Porcelain crowns.....	11
Porcelain fillings.....	33

Cases in general practice, such as extractions, treatments, pyorrhea, and case of implantation (result of baseball thrown being stopped by patient's face) I have kept no full record, but they are numerous.

On the receiving ship *Wabash*, at Boston, the following dental work was recorded:

Appointments made.....	1,191
Alveolar abscesses treated.....	47
Pyorrhea alveolaris (Rigg's disease).....	20
Teeth extracted (worthless).....	124
Pericementitis acuta.....	1
Fistula alveolaris.....	1
Syphilitic patients treated.....	12
Cement fillings.....	301
Amalgam fillings.....	217
Gutta percha (temporary treatments).....	638
Gold fillings.....	34
Porcelain crowns.....	16
Gold crowns.....	96
Gold bridge work, teeth replaced.....	66

THE BUREAU.

The efficient organization by divisions, which was developed under my predecessor, has been continued, and it would seem that there remains little to be desired in the promptness and absence of duplication or interference with which business is transacted. The routine work of the bureau need not occupy space here, for the results of many of its activities are to be found under other sections. Should an additional clerk for statistics be authorized it will undoubtedly be found advantageous to separate the statistical and literary work from that of the record and pension division; the shortage of clerical force has been already referred to in the introduction to this report. A method for utilizing reports and returns to the greatest possible advantage has been evolved, but before this can be fully instituted another statistical clerk will be required to assist the officer in charge of that division in enhancing the accuracy of the sick returns and corresponding tables by conducting correspondence with view to correcting and readjusting diagnoses and sick days in the light of subsequent developments. It has long been recognized that there are certain statistical leaks which should be stopped or accounted for, such as sick days not formerly computed from sick leave, days of treatment in other than naval hospitals when not under observation of a naval medical officer rendering returns, sick days at hospitals for the insane, etc. These factors have been accounted for in so far as is at present possible at the foot of the table on page 158, showing the distribution of the navy's physical disability. It will be noted that the sick at the naval sanitarium for tuberculosis (*Las Animas*) have been removed from the regular statistical tables of the active force and classed with that of hospitals for the insane inasmuch as both practically represent an inactive force so far as concerns ability to render future service in the navy. At the same time the approximate extent of what might be considered theoretical error is now determined, and the extra sick days may be added to any column of personnel or to the sick days opposite tubercular or mental affections respectively in the consideration of total damage.

The elaboration and improvement of health statistics are here and elsewhere discussed in detail to show the importance of this kind of work; the successful detecting, locating, and solving of sanitary problems depend largely upon the accuracy and intelligent interpretation of the data obtained by the statistical division.

All annual and monthly sanitary reports from ships and stations have been extracted without delay and referred to the department or bureaus to which they pertained; prompt action has been obtained, many meritorious recommendations have received favorable consideration, and resulting improvements have been thereby expedited.

The growing necessity for a comprehensive individual health record to accompany each officer and man throughout his entire service in the Navy or Marine Corps, to be kept in the custody of the medical officer, has received the careful study of officers in charge of the record and pension and statistical divisions throughout the past year. The various records proposed by medical officers during the past eight years were carefully analyzed and such suggestions as seemed practicable and deserving of incorporation were combined in the record, which received the department's approval July 14, 1910, to go into operation January 1, 1911. A number of forms have been discontinued or so far simplified that the aggregate clerical work of the medical departments of ships and stations rendering returns will probably either be diminished or at least not increased.

The medical officer designated by the bureau to conduct sanitary inspections of the offices under the Navy Department submitted his report on December 21, 1909. His conclusions and certain observations upon overcrowding, which merit earnest consideration, are herewith extracted.

It is very apparent that the offices under the different bureaus are overcrowded in nearly every instance. This subject is mentioned first as being of the most importance, for when such condition exists there is no system of ventilation that can be perfect, impure air being the result, and there is more liability to communication of disease * * *. Under "Ventilation" the amount of floor space that should be allowed for each person in a room is considered, the conclusion being that 100 and even 125 square feet is not thought excessive. In the case of the drafting rooms the question of light has to be considered, and much space is taken up by extensive tables and files, therefore, about 150 square feet is not thought excessive. On this basis charts were made giving the numbers of the different rooms, their square feet (floor area), the number of people now constantly employed in same and the number calculated as being about their capacity. The drafting rooms, in which the greater allowance is made, are numbers 2, 4, 182 to 188 (the Bureau of Construction and Repairs), 379 to 387 (Bureau of Steam Engineering), 361 (Bureau of Ordnance), 511 to 518 (Bureau of Yards and Docks, Mills Building). Those rooms which are occupied by the Secretary and Assistant Secretary of the Navy, chiefs of the bureaus and their assistants, and a few others which are evidently not congested, have not been included. The area of a few have been omitted as they have been changed since the original plans of the building were made and their floor space not estimated.

A summary of the rooms taken into account, whose floor area is known shows: 28,994 square feet are occupied constantly by 362 people with the calculated capacity for 239, being in excess of 123 or 33 per cent. Included in this are the drafting rooms with area of 7,234 square feet, occupied by 94 people with estimated capacity of 49 (an excess of 45, or 44 per cent.)

The basement rooms have poor light, their ventilation is not good, and in general they are considered inefficient for office rooms, especially for the force that now occupies them. They would well serve the purpose of storerooms for cases of blank forms, old ledgers, file cases not constantly used, etc., with a small force only necessarily employed there.

As the highest outlet for impure air in this building is the transom over the door and above the upper window sash when lowered, all space above this is so-called "dead space." In this space the warm air, made impure by breathing, collects, and, while not used constantly, still having no outlet, it must be brought into circulation again by currents caused by those moving about in a room and the natural mixture of gases. This statement is made in the belief that all space in height of the room above 10 feet should not be taken into account when calculating cubic space allowance and, therefore, in order to approach a standard at least 100 square feet of floor space should be allowed for each person. It should be taken into consideration that a

large amount of space in every room is taken up by desks, tables, files, bookcases, etc., so that when the basis 100 or even 125 square feet is assumed, it should not be thought unreasonable. The average [carbon dioxide content of 15 selected rooms] showed 8.84 parts CO₂ in 10,000 or 2.84 parts above impurity, a condition that speaks for itself.

SUMMARY OF RECOMMENDATIONS.

1. Relief of congestion by more space allotment, this, probably, being only possible by using another building.
 2. Aiding ventilation by using some kind of window ventilators.
 3. Improving the method of cleaning offices by some system which does not make use of a force on duty all day; or by using this force as at present, in conjunction with the work done thoroughly by another force under the office of the superintendent, this being considered the best.
 4. Linoleum on floors in place of carpets.
 5. Replacing present wood files and cases by metal ones as far as practicable.
 6. Installing some form of drinking fountain in the several bureaus or using of individual drinking cups.
- Attention to cleaning of coolers and handling of ice advised.

The quarterly Naval Medical Bulletin has now reached what is deemed a proper standard size; every consistent effort has been made by judicious selection from material offered to improve the quality of its contents by encouraging those officers of long practical but of little writing experience to contribute. It is not aimed to develop a medical journal but a medium for the prompt distribution and interpretation of the views and experiences of naval medical officers, so that much that is observed by individuals may be shared by all associated in our special lines of work. The dissemination of the various methods and results of experiences with venereal prophylaxis would alone have justified the publication expense of about \$2,000 for the bulletin last year. The publication of original observations and research work is not intended for announcement to the world at large so much as to inform and stimulate similar interest among members of the Medical and Hospital corps; unusual clinical cases are not included for placing on record on account of rarity alone; with few exceptions manuscript is supposed to meet the requirements that the article, case report, review, or suggestion shall be deserving of the professional interest of a considerable number of officers. If the bulletin chances to find, as seems possible, a field outside the service, this fact must be considered as purely incidental; the sale to persons not deemed officially entitled to receive this periodical has been provided for by the Superintendent of Documents.

In connection with the rebuilding and renovation of naval hospitals a comprehensive bureau-inspection form was adopted a year ago. Full and accurate information is now at hand concerning the condition and administration of the more important hospitals on the Atlantic coast, and with the aid of these inspection reports it is proposed to promote so far as possible unification of hospital routine.

The board of inspection for shore stations contemplates using this form; the presence of a senior medical officer of long hospital experience on this board should make for practical, constructive criticism and the uniformity of administration contemplated.

The cordial cooperation of other bureaus in a common aim for the best interest of the service has contributed greatly to the efficiency of the work of the medical department on ships and stations; the

concurrence of the Bureau of Navigation in recommendations for the detail of medical officers and members of the Hospital Corps is very important, particularly on account of the shortage of officers and the necessity of assigning or transferring each where his particular abilities count most; recommendations looking to improved sanitation on ships whether emanating from the ships or bureau have wherever practicable received the interested support of the Bureau of Construction and Repair, and the effective assistance of the Bureau of Yards and Docks in connection with hospital construction merits recognition.

RECRUITING.

The growing recognition of the importance of the examining surgeon's functions at recruiting stations has led to the assignment for this work, with but one or two unavoidable exceptions, of officers who have had the experience of at least one cruise to teach them practically the type of men likely to maintain physical efficiency. The fact that the shortage of officers of the corps has rendered it impossible to detail medical officers to the majority of marine recruiting stations has continued a matter of deep concern; and the unfavorable results under the present system are well illustrated by the relative number of recruits in the navy and marine corps surveyed for disability existing prior to enlistment, the percentage of loss being more than twice as great in the latter branch of the service; the actual figures were for the navy 472, and for the marine corps 238. The stations recruiting marines which furnished the greater number of such surveys were: Toledo, 41; Chicago, 24; Pittsburg, 23; Indianapolis, St. Louis, and Syracuse, each 12; and Cincinnati and Buffalo, each 10.

These 710 early losses to the service indicate either that certain present requirements should be rigidly adhered to despite the anxiety to obtain recruits, or that the physical standards should be raised rather than lowered as was done by reducing the required weight of apprentice seamen of 17 years from 115 to 110 in October, 1909. The expression "poor physique" occurring so frequently and the 25 cases of tuberculosis which became apparent so soon after enlistment are taken as justification of the above opinion.

In connection with the discharge of recruits for physical disability, the attention of officers is frequently called to a species of malingering which manifests itself by exaggeration of the importance of slight abnormalities upon the part of malcontents who undoubtedly occasion many surveys at training stations; at one of the stations this factor was largely eliminated by not permitting the recruits to learn of such defects as were not deemed sufficiently disqualifying to merit discharge, yet were noted upon verification of descriptive lists in order to protect the interest of the Government.

The publication in the Bulletin and other journals of case reports, notably of latent or potential insanity and cocaine habituation, has served to indicate to the service certain important disqualifications which recruiting officers should be careful to detect.

The following classification of physical disability for which recruits were recommended for discharge is submitted for further guidance:

Disabilities existing prior to enlistment for which men of the navy and Marine Corps were discharged during 1909 after less than four months' service.

Cause of discharge.	Number discharged.	Cause of discharge.	Number discharged.
Abdominal pain.....	1	Inflammation of optic nerve.....	1
Acne.....	2	Intellect, defective.....	10
Appendicitis, chronic.....	1	Lymphadenitis.....	1
Asthma.....	3	Melancholia.....	4
Asthma and poor physique.....	1	Neuralgia, spinal.....	2
Bright's disease.....	3	Neurasthenia.....	4
Bronchitis:		Nose, chronic inflammation of.....	1
Chronic.....	15	Obesity.....	1
Chronic; poor physique.....	1	Orchitis.....	1
Catarrh:		Paranoia.....	1
Gastric.....	1	Paralysis of hand.....	1
Nasal.....	1	Poor physique.....	30
Chancroid.....	1	Poor physique and heart disease.....	1
Color blindness.....	12	Pterygium.....	2
Conjunctivitis.....	4	Rheumatism, chronic.....	9
Corns.....	3	Rheumatism and poor physique.....	1
Deafness and defective hearing.....	36	Rupture.....	43
Debility.....	1	Seasickness.....	1
Deformity.....	68	Spasmodic contraction of muscles.....	1
Dementia.....	13	Squint eye.....	1
Drug addiction (cocaine or morphine).....	3	Stammering.....	3
Ears, diseases of.....	17	St. Vitus's dance.....	2
Enuresis.....	8	Synovitis.....	1
Epididymitis.....	1	Syphilis.....	18
Epilepsy.....	25	Teeth, defective.....	9
Flat feet.....	69	Testicle:	
Flat feet and syphilis.....	1	Enlarged.....	1
Glandular enlargement, general.....	3	Undescended.....	1
Golter.....	1	Thrombosis.....	1
Golter and heart palpitation.....	1	Thyroid gland enlarged.....	1
Golter and varicocele.....	1	Tonsils enlarged.....	1
Gonorrhoea.....	13	Tuberculosis of lungs.....	12
Gonorrhoeal rheumatism.....	3	Varicocele.....	15
Hemorrhoids.....	8	Varicocele and heart disease.....	1
Heart disease.....	128	Varicose veins.....	11
Hives.....	1	Varicose veins and heart disease.....	1
Hydrocele.....	1	Vision, defective.....	53
Hysteria.....	4	Yaws.....	1

The practice of transferring recruits from the seaman branch to the ratings of coal passer without physical examination to determine fitness to perform the arduous duties required in firerooms apparently reached considerable proportions during 1909, as is evidenced by the report of the surgeon of the *Nebraska*, who remarked:

I find on looking over the coal passers that there are 12 boys who are too small to perform their duties. The lightest of these boys weighs 113 pounds. Upon inquiry I find that at certain training stations volunteers for coal passers are obtained from among the boys undergoing training by offering the inducement of getting off the station at once if they change their rating to coal passer. Apparently no attention is paid to the size or weight of the boys and all are accepted who offer. This works an injury to the boys, as they are physically unable to perform the duties required by their rating. It also reduces the efficiency of the ship, as easy places must be made for them or 3 boys are put to do the work of 2 men.

The fleet surgeon of the Pacific Fleet in his annual report made the following observations on this important subject:

The fireroom force.—Since late in August or early in September (1909) the cruise of the armored cruiser squadron has been in great degree an engineering cruise. It was on September 5 that the first squadron of this fleet started a record run from San Francisco to Honolulu. The speed under natural draft was practically 18 knots and much of the run was made in quiet and warm weather.

without adequate training to perform the maximum work of the rating, length and rate of run and character of weather considered.

During the run there was considerable trouble in the engineer force on account of heat cramps, heat prostration, and general exhaustion. In that connection medical officers of several ships made reports either verbally or in writing and thus the subject came to be considered of sufficient importance to warrant the gathering of such information in relation to the physical qualities of coal passers as was readily available.

It appears that subsequent to the run there were 925 coal passers on the 8 ships that made the run and that 727, or 78.8 per cent, of those had been enlisted as apprentice seamen, a majority during the year. Fifty per cent of the 727 were at time of change of rating under the minimum age prescribed for coal passers and 184, or 50 per cent, of those were under 19 years of age. It was also determined that at time of enlistment 233, or 32 per cent, of the 727 coal passers were under the weight prescribed for height on enlistment as coal passer. As many of the enlistments had been recently made there were a majority of coal passers who were under age, many only 17 or 18 years of age, and a number under weight.

While this report does not relate to the service as a whole, these facts may be of general importance. At any rate in relation to this squadron of big ships, it appears that the physical standards prescribed for enlistment in the rating of coal passer have never been applied to the large majority holding that rating and that the efficiency of the engineer force would be greatly improved if men were obtained under those standards.

It does not appear that there is any physical examination for change of rating from apprentice seaman to coal passer, although enlistments in those ratings are made under instructions that differ greatly. It may be that the required number of men are not found to enlist as coal passers under present physical standards, the advantages offered not being sufficient. It may be that it is good policy to have all recruits receive certain instruction at the training station, but that if the physical standards now prescribed for coal passers were applied to volunteers for transfer to that rating the required number of men could not be obtained. The standards are not too high and therefore in either event the inducements offered would not be sufficient. But, however that may be, medical officers agree in the opinion that the rate of coal passer, more than any other rate, contains many who, from a physical point of view, should never have been given that rating and that minors 17 or 18 years of age are not only unsuitable from that point of view but with habits of life unformed may also be undesirable additions to the force below from other points of view.

Seeking analogy with an army, it may be said that the legs of a navy are in the coal bunkers of ships, and it is therefore submitted that while our navy is made up very largely of young men and is doing much good work, the present method of obtaining coal passers is worthy of additional consideration. It certainly seems almost useless to have special physical standards for coal passers that are not applied or utilized in the large majority of cases.

MEDICAL ASSISTANCE AVAILABLE IN A NATIONAL EMERGENCY.

This subject has been so fully discussed in recent annual reports and the need for a medical reserve corps for the navy was so ably argued by the department in communications to the last Congress that space need not be taken for reiterating the advantages which should follow the organization of such an auxiliary to the Medical Department; a subsidiary, but for the time being important, result of the establishment of a reserve corps for the army may be quoted from the Annual Report of the Surgeon-General of the Army for 1909:

The distinguished physicians who head the Medical Reserve Corps have been a potent factor in this result (the increase in number of candidates commissioned in the Medical Corps from 10 to 29 in one year), many of them through the interest created by their being members of the army medical service interesting themselves in obtaining desirable candidates, principally from the medical schools and hospitals with which they are personally associated. In fact, if no other benefit resulted to the army from commissioning the leaders of the medical profession of the country in the medical reserve corps, it is safe to say that the desirable candidates obtained by and through them demonstrates the wisdom of such action.

The only notable international relief work accomplished during the year 1909 by the Medical and Hospital corps, aside from that at Messina and Adana, which was outlined in last year's report, was the establishment of an emergency hospital at Bluefields, Nicaragua, by the medical departments of the *Tacoma*, *Marietta* and *Des Moines* to care for the wounded of the Government and insurgent forces following the battle of Recreo, December 20, 1909. The medical officer of the *Marietta* also supervised the sanitation of the local camps. The medical officers reported treatment of 40 cases of wounded admitted to hospital and 85 not admitted and 104 operations with 8 deaths. Detailed reports of this work were published in the April number of the Naval Medical Bulletin.

PROMINENT HYGIENIC PROBLEMS OF THE SERVICE.

A casual glance at the statistical tables which indicate disability rates for the various diseases suffices to show that by far the greater part of this damage results from what progressive sanitarians have long recognized as preventable diseases, notably those known as contagious and venereal. Practically both of these classes of affections should be grouped with infectious diseases in general in that it should be our aim to eliminate all possible infections from entrants to the service and reduce to the minimum compatible with reasonable liberty all subsequent exposure. Some measure of success has been attained with contagious diseases, as will be found by comparing the tables for 1909 with those of 1908 and former years. Certain imperfections in the segregation of recruits at Newport and particularly at Norfolk have been corrected, while little improvement in conditions at San Francisco has been noted. Aside from the deplorably perennial typhoid problem at Norfolk, which the training station and barracks have been better enabled to control than have the visiting ships, venereal disease has resulted in a truly serious situation, there being over 100 primary admissions for this class of affections during the first quarter 1910, with an average complement of 1,881 (a yearly admission rate of 217 per thousand among young men who have but recently entered the service free from such disease). Venereal prophylaxis should be as consistently enforced at training stations as on board ships, where similar control has been so efficacious.

Physical training of the personnel.—If one were to judge from the sporadic and ill-concerted efforts which have been made to systematically improve the physique of the entire personnel one might conclude that the question of physical training had never been widely recognized as a problem worthy of intelligent and collective solution in our service. To be sure a routine largely perfunctory in character of "setting-up" exercises has been in vogue for some years, but no stretch of the imagination could attach the idea of "system" to its execution, and so far as the average commissioned or petty officer leader has known (or perhaps cared) the drill was carried out with no other end in view oftentimes than getting all hands on deck save the "excused," who usually need it most, to insure a few minutes of fresh air and expanded lungs.

Physical training, or the maintenance of a creditable physique of commissioned or warrant officers, attained during preparatory service

at civil schools or at the Naval Academy, through or in spite of whatever gymnastic drill chanced to be in vogue, have until the last two years been left to the initiative of the officers, with results which have not been sufficiently analyzed to warrant dogmatic opinions. This *laissez faire* received a rude shock upon the publication of the executive order of January 4, 1909, which prescribed an annual physical test with supposed choice of three varieties, the accomplishment of which premised, but did not prescribe, a certain amount of preparation. Undoubtedly the service needed some such effectual awakening to appreciate its physical shortcomings not so much for the sake of increased efficiency of those of already molded and matured physique, but to insure some adequate provision for the younger officers, and through them for the enlisted recruits who will within a few years comprise the greater part of the personnel. The at once evident and inherent defects in this scheme were that no discrimination was made between the aged, the mature, and the young, favorable or inclement weather, on sea or shore duty, at home or in the Tropics; while the age, former habits, and condition of service restricted many if not the majority of officers to the walking test. These criticisms were generally met with the observation that the test was not designed to be one of real endurance, but represented the minimum requirements for any officer on the active list of whatever age or station. Practically the most manifest failing of the present test is that it requires a definite amount of work of an annoying rather than refreshing character to which the vital organs and musculature of most naval officers have not been adapted and to which the nature of their duties would never inure them.

The ability to accomplish the present test, in the opinion of many, is no criterion of capacity to perform any duty which military efficiency is likely to exact. The chief value of physical training in a naval service does not lie in the mere development of muscle nor even of endurance, but in the coordination of muscular power to carry out the direct or reflex will of the nervous system with alertness and precision. In the words of Commander Niblack the "physical confidence which, combined with physical energy, constitutes fighting spirit, which is sometimes called courage." It is difficult to believe that the ability to automatically extend each leg after the other for 50 miles in twenty hours during three consecutive days will promote the above-desired qualifications. Physiologists recognize generally that upon reaching maturity endurance depends more and more upon the sustained action of the heart and that the heart's chief assistance must come from the auxiliary and respiratory musculature of the chest and trunk to further the required flow of blood; hence attention should be directed to the proper exercise of the trunk musculature, which is favored more by the use of the arms than the legs.

After the first year of the physical test the consensus of opinion of medical officers seems to be that it has utterly failed to accomplish the design to encourage regular daily exercise; very few have observed any real benefits, considerable tangible harm has resulted, and many officers justly question the expediency of placing what amounts to a severe strain upon the heart when adequate preparation is not made mandatory. If the test is to be modified, undoubtedly less harm would be done by requiring one-half the distance in two-thirds and three-fourths the present time of fifteen and twenty

hours, respectively, every three months. Temporary suspension of the test on account of tropical service or unfavorable weather conditions might well be made discretionary on the part of the senior officer present. The uncertainty of weather is a frequent source of worry and induces many officers to accomplish as much distance as possible during the first two days for fear of inclemency on the third, when common experience tells them that they are in better condition, barring sore feet, to make the greater distance on the third day. The bureau feels that in place of an irksome task for officers already developed in the service, without an adequate system of physical training, the present annual physical examination might well be continued and with it a dynamometer and blood-pressure test with which the examining surgeons would determine what groups of muscles, if any, required particular exercise and prescribe for the same definitely. All officers, unless excused for some temporary sufficient reason, should be required as part of his official duty to take a half day's recreation in the open air twice each week, and to certify at monthly intervals to the effect that the time has been utilized in some acceptable form of physical exercise and that the prescribed movements have been carried out.

For the younger officers and recruits whose bodies have not yet passed the moldable stage (25 years to state a definite age) undoubtedly the Swedish system of training as adopted for the British service is, as Surgeon Bell of the Royal Navy says, "the soundest system for the training of all-round physique that can be adopted by any nation." Selected medical and line officers should study the details of the system in Sweden and their adaptation to European armies and navies first hand, and without further delay impart their experience and teaching to the instructors and students of the Naval Academy, Naval Medical School, Marine Officers' School, and all other service schools, and should speedily develop a corps of petty officer instructors for the naval training stations and noncommissioned officers for the camps and barracks of the Marine Corps. At the larger stations there should be regular advisory supervision by medical officers specially trained in the indications and effects of the system until ultimately sufficient young men shall have become experts to insure the continuation of the work wherever our men are stationed on shipboard or in any part of the world. While the principles of the system are familiar to many of the service already and the details to a few their limited delineation here seems indicated.

The opportunity for inquiring more particularly into the application of the Swedish system presented itself during the present summer, and Surg. J. F. Leys, who was returning from his last station by the way of England, was requested to make an investigation. His observations are here quoted in part:

As the sailing ships disappeared from the navy, to be replaced by steam-propelled vessels, it became more and more evident to the authorities that the sailor was deteriorating in physique, general activity, and nerve. This was believed to be due to the fact that the modern man-of-war does not offer facilities for training in these qualities as did the masts and yards of sailing ships, and with the disappearance of these latter from the service the need of a special system of physical training brought the present gymnastic department into being in 1902.

Commander Watson, Royal Navy, was appointed as superintendent of gymnasia, and with him a staff of lieutenants, to formulate a scheme to regenerate the physique and activity of the sailor, Portsmouth being selected as the location of the central depot.

The first step taken by this officer was to study thoroughly all the existing gymnastic systems, French, German, Japanese, etc. He also went through a course of gymnastic training at Aldershot to acquaint himself with the methods employed in the British army. His preliminary investigations clearly showed him that none of these systems examined met the needs of the naval service. They all consisted merely of a collection of exercises based on no order or principle. Many of the exercises employed tended to distort the body rather than to develop it symmetrically. They were designed to cultivate certain postures or concerted movements or mere muscular strength, rather than to produce an active and elastic physique. These systems were therefore all rejected as giving no definite value for the time expended on them and containing many clearly undesirable features.

The attention of the commander superintendent was now directed to the Swedish system, and in 1905 he proceeded to Stockholm to study the subject on its own ground. There he found what was wanted—a system founded on a scientific basis, with a reason for every detail, suitable for the gradual physical education of young officers and men.

The creation of the Swedish system of gymnastics was the life work of Peter Henrik Ling, a Swedish poet and philosopher, born in 1776. In early life he met with adventures and reverses which affected both his health and his circumstances unfavorably. He fought against Nelson at Copenhagen. Returning to Sweden in 1800 he was taught fencing by some French refugees and soon became expert in the art. In this exercise his health was so benefited that the idea occurred to him that exercises systematically applied might be used for the cure of disease. He soon perceived that his idea had a large application and that a regular system of physical exercises should form part of the educational system of a nation.

Realizing that the selection of exercises to suit the human body and to produce definite physical results must be based on a complete knowledge of the construction and working of the body, he applied himself to the study of anatomy and physiology and the various movements of which the human body is capable. He examined all the known systems of physical training, both ancient and modern, and carried out many experiments on himself and others to find out exactly what effects certain movements had. After years of this preparatory work, he drew up a system of exercises, each of which had a special purpose and result. To his system he admitted no exercise for mere display, no acrobatic trick, no exercise whose effect could not be clearly shown.

For years his ideas were scorned, but his perseverance won at last, and in 1815 the Swedish Government, at his request, founded the Royal Gymnastic Institute, at Stockholm, for the training of both sexes in what has come to be known as the "Swedish system of gymnastics." Ling was in charge of the institute till his death in 1839, and his system, developed and perfected by his son and pupils, is the national system of Sweden. His present-day successor in charge of the Royal Central Gymnastic Institute at Stockholm is Prof. L. M. Torngrén.

When it had been decided to adopt the Swedish system for the physical training of officers and men in the British navy, the superintendent realized that the work was so based upon anatomy and physiology that the assistance and advice of medical officers would be required in carrying it out properly. After Commander Watson had taken a course at Stockholm, Surgeon Bell was sent to Stockholm to take the course; and later, in 1907, a third officer, Lieut. Lockhart Leith. Each of these British officers spent about nine months under instruction at Stockholm. I am given to understand that the complete course in the Royal Central Gymnastic Institute covers about two years and begins with a course in human dissection covering several months.

Surgeon Bell and Lieutenant Leith, on their return from Stockholm, were assigned to the physical training staff at Portsmouth. At the request of the Dominion government, Surgeon Bell is now under orders to a tour of duty in the new Canadian navy in connection with physical training work.

GENERAL PRINCIPLES OF THE SWEDISH SYSTEM.

The system has three fundamental characteristics.

I. *The nature and intention of its exercises.*—Each exercise employed has a definite physical effect, and is practiced solely to produce that effect. The exercises are exactly defined as to form, because this is essential to the exact determination of their physical effects. An exercise comprises three distinct parts:

- (a) The attitude from which the movement starts.
- (b) The points through which it passes.
- (c) The final position at which it ceases.

A large number of exercises, called "free standing exercises," are carried out without the use of any apparatus. As the pupils advance in the course, certain positions are

obtained by the aid of a fixed apparatus, which supports or fixes certain points of the body, so as to bring about modifications in the exercises which the laws of gravity would otherwise render impossible. The apparatus is designed to admit of large numbers using it simultaneously, so preventing the loss of time, which is the usual accompaniment of old forms of apparatus used in gymnasia. Harmonious or equal development being a cardinal principle of the Swedish system, exercises are provided for every part of the body, producing many different and distinct effects. The exercises are divided into groups according to their most pronounced physical effects. Great attention is paid to the development of the chest and to the fact that the breathing should be free at all times. No exercise is applied merely for developing the muscles as such, so that no overstrain is produced. The qualities aimed at are suppleness and agility.

II. *The progression of the exercises.*—The exercises are arranged in a graduated progression, from simplest to hardest. Hence there are many exercises, for many intermediate steps are required. The necessity for this gradual progression is to avoid all strain and to enable the body gradually to acquire an ability to reach certain positions which ought to be possible to every healthy body, but which have been impossible to the untrained body.

III. *The arrangement of the exercises in the lesson.*—As a harmonious development of the whole body is to be obtained, every part of it must receive its due attention at each lesson. This system consequently exercises at every lesson each of the different groups of muscles. It has been proved that the efficiency of the exercises is increased if they are practiced in a certain definite order. The arrangement of the exercises for the daily lesson in this well-considered order constitutes what is known as a "table of exercises." The order is based on the effects of the exercises, care being taken not to let several movements that have the same effect follow each other.

The general arrangement of a table, as employed in the Physical Training School at Portsmouth, is on the following lines:

1. Leg exercise.
2. Span-bending exercise.
3. Heaving exercise.
4. Balance exercise.
5. Dorsal exercise.
6. Abdominal exercise.
7. Marching exercise.
8. Lateral exercise.
9. Jumping exercise.
10. Breathing exercise.

The Swedish authorities on the subject assert that if such a routine is arranged and properly carried out the effect is one of rest and refreshment and not of fatigue. The constant change of movement prevents monotony and makes the lesson recreative at the same time that the necessary discipline is preserved. Surgeons Bell and Hearn both testify from personal experience in going through the course themselves that this ideal is realized, and that this system of gymnastics makes a man feel alert and fit for anything in the shortest possible time. No attempt is made to require or enforce total abstinence from alcohol during the course, but either abstinence or strict temperance is strongly enjoined on every class at the outset, and is quite generally practised by all officers and men taking the course.

I am told that the Swedish system has been officially adopted by Norway, Denmark, Switzerland, and Belgium, is about to be adopted by Portugal, Chile, and Mexico, and has been introduced in the French army. The British army has taken it up; and during my stay I had opportunity on the evening of July 27 to witness a performance of some of the exercises of the system by squads of soldiers from some of the regiments stationed at Portsmouth.

It is the purpose of the physical-training school of the British navy, at Portsmouth, to continue the instruction of classes of officers and men so that they may in turn become instructors in physical training throughout the service, both ashore and afloat.

The course for enlisted men to qualify for this purpose covers a period of six months. Picked men, not below the rating of "leading seaman," young, and with first-class records in the service are detailed to the class, about 20 of them, every six months. They receive a careful and thorough instruction in the theory and practice of the Swedish system as arranged for the navy. Qualified officers personally take them through a "table" each day, showing the correct and incorrect positions of the various exercises, explaining the rationale of each position and movement. Systematic Swedish gymnastics are thus practised by the class for one hour in each forenoon. For another period of an hour, more or less, in the afternoon other exercises are prac-

tised which are classed as "outside branches," namely, boxing, catch-as-catch-can wrestling, jiu-jitsu, fencing, and club swinging, and bayonet exercises. These add great variety and interest to the course and qualify the members of the class when they go out to other stations and to the fleet as instructors to act as competent referees in such sports and to take a leading position among their comrades in athletic matters generally. Lectures are given throughout the course on the anatomy and physiology of bodily exercise by a qualified medical officer. The men learn the handling of a class and the methods of instruction themselves by taking turns at putting the class through certain "tables," and by being given charge of classes of ordinary seamen and boys from the barracks, under the supervision of a staff instructor. At the end of their course they are examined in all the subjects taught (as per form of marks, attached), those who are successful becoming instructors of physical training with rank as petty officers. Every three years, if possible, these men are required to requalify in a four-months' course. While in the service their qualification and requalification is noted on their enlistment records and governs in their detail and special pay. If they leave the service by honorable discharge at the end of an enlistment they receive a certificate of their qualification in the form which may be of use to them in obtaining similar positions in civil life.

Officers wishing to qualify for physical training are put through a four-months' course similar to that given the requalifying class of enlisted men. The average qualifying class consists of from 7 to 10 officers, being made up of naval and marine lieutenants and naval surgeons. The principles of the system are gone into somewhat more deeply than with the class of enlisted men. At the end of the course officers are examined and marked, and are given a certificate marked "first class" if they make 90 per cent of marks, and "second class" if they make from 70 to 90 per cent.

There is a short preliminary course for officers (lieutenants, surgeons, and marine officers), lasting two months, which is to be given to as many officers as possible in future. No officer is eligible for the four-months' qualifying course who has not had this preliminary course. Already all surgeons entering the service are put through this course in addition to their professional course at Haslar Hospital, near by, the gymnastic course occupying the last two months out of their six months of preliminary instruction at Haslar on entering the service. These medical classes of entering surgeons average about 15 twice yearly. This short course now given all entering medical officers qualifies them to some extent to act in an advisory capacity to the physical-training lieutenant aboard ship in questions arising in the work. This short course is not a qualifying course for officers, only a preliminary or elementary one.

The qualifying course of four months is given only to officers who have had this preliminary course of two months and who have shown aptitude for the work. No lieutenant is eligible for the qualifying course who has not served at least twelve months as a watch officer afloat, and no surgeon is eligible who has not served two years afloat. No officer is ever detailed to the qualifying class unless he is young, of active habits and athletic tastes and with all the qualifications that constitute aptitude, physical, mental, and moral. The average age of lieutenants and marine officers so detailed is 23 to 24 years, and of surgeons about 30 years. No lieutenant over 30 has ever been detailed, and no surgeon over 35. It is the intention of the admiralty that the qualified physical-training officers and men shall be, throughout the service, the "smartest" men in the ship.

The incoming generations of young officers at Osborne and Dartmouth, and of boys at Shotley and elsewhere, will have had sufficient preliminary work in the system to make them eligible for the four months' qualifying course, if selected for it, without the two months' preliminary course at the physical-training school which is now required for others.

As to the results which the British naval authorities believe that they are obtaining from the adoption of the Swedish system of gymnastics, although the system has been used only about four years—since 1906—and records are as yet limited, and it is difficult to fix a basis of comparison between the present and the former state of things, official opinion is strongly favorable to the system. One matter of which record has been kept in the classes is chest expansion. The records of classes that have gone through the physical-training school show an average gain of 50 per cent in chest expansion in the course of the four-months' work. Many individuals gained 100 per cent.

The system when first introduced was received with skepticism, and its first representatives detailed for physical-training duties aboard ship often met with ridicule. Their aims and the principles of the system were entirely misunderstood. They were nicknamed "strong men" and "monkey men." The crew's time necessary for their work was grudgingly given. This first feeling has disappeared. Captains of

ships and others now frequently bear unsolicited testimony that the new system is putting aboard ship a line of recruits superior to their predecessors. The men are alert, inspired with pride in their condition and appearance, and keep themselves "smart." The admiralty are well satisfied with the system so far, and propose to continue it along present lines with improved facilities and constantly enlarging scope.

There has just been completed at Portsmouth a new building for the physical-training school, at a cost of about \$100,000. It contains a gymnasium hall about 50 by 200 feet, fully equipped with apparatus on the Swedish system, a swimming tank 30 by 80 feet, a lecture room, commodious offices for the superintendent and members of the staff, all necessary dressing rooms, lavatories, etc., for both officers and men.

The duties of the qualified medical officer on the staff of the school are, briefly:

- (1) To be present at the school during the working hours every day, 9 to 11.40 a.m. and 1.30 to 3.30 p.m., except Saturday.
- (2) To make physical examinations of the officers and men at the beginning and end of their course and keep a record.
- (3) To watch the working of the system and its results.
- (4) To make systematic examination of the circulatory system of each candidate during the different stages of the course and note the effect of the various exercises on the heart.
- (5) To give lectures on the anatomy and physiology of exercise. Twenty-four lectures are given during the course, the class taking notes and being examined in the subject at the end. A papier-maché manikin is used for demonstrations.
- (6) To advise the superintendent and instructors on questions in which medical knowledge is required. It will be readily understood that one can not pretend really to comprehend in a brief visit of observation and inquiry the details of a system for which a two-months' course is required to obtain a mere preliminary knowledge, and an additional four-months' course to obtain a qualifying knowledge. My own opinion of the apparent merits of the system must therefore be scarcely worth giving. Little as it may be worth, however, I must give it as altogether favorable.

The men in training go about the work in a brisk and smart manner, and show genuine interest in the performance of the exercises. The officers who have gone through the course testify to the benefit derived in their own cases, and are enthusiastic. The admiralty and the service at large seem to be most favorably impressed with results as far as they can be yet seen, and the time and care spent at the outset to find the right system creates a strong presumption in its favor.

Should it be decided to take up the Swedish system in the United States Navy, it would seem wise first to select, say, two junior lieutenants and one assistant surgeon, picking men of the right age, physique, and aptitude for the work and send them first to Stockholm for nine months; then endeavor to secure the permission of the British Admiralty for them to visit the Physical Training School at Portsmouth for a month to observe the adaptation of the Swedish system to a naval service. On their return to the United States they would constitute the qualified nucleus of a faculty for the prosecution of the work in our service. I am told that it is desirable to be at Stockholm by the 1st of October to begin a course. It would be desirable to notify such officers of their selection a sufficient length of time in advance of their departure for Stockholm, to enable them to get a rough working knowledge of the Swedish language. There would undoubtedly be no difficulty in arranging with the Swedish Government for their admission to the Royal Central Gymnastic Institute, which is a government institution, in which I am given to understand no fees are charged.

As connected more or less with the subject of physical training, I made inquiries as to physical tests or physical examinations of officers in the British navy as qualifying for promotion, and was surprised to learn that they have neither. An officer receives his first commission after physical and professional examination. He receives all his subsequent promotions, whether by seniority or selection, on his record, and without any examination whatever, either professional or physical.

It has perhaps not been sufficiently appreciated to what extent the life of the average enlisted man has changed during the last twenty years from the hardy work on deck to the indoor mechanical labor which demands close application rather than agility; the disregard of the laws of sanitation and physiology now tend to the predominance of an entirely different class of diseases. It is for this reason fitting that we should seek the experience and views of some officer now at

sea who has been a keen observer under both the old conditions and the new. His proposition for gymnasia and facilities for out-of-door games should meet with hearty concurrence, although the bureau would deem it wise to insist upon the maximum of out-of-door recreation, even to the extent of having open-air gymnasia, consistent with weather and climate. A gymnasium with trained petty officer instructors is one of the most apparent desiderata for the convalescents of each large hospital. Medical Inspector Gatewood, in his annual report as fleet surgeon of the Pacific Fleet, made the following comment on physical tests:

Physical tests.—The chief object of the physical tests is stated in the order establishing them to be the cultivation of the habit of taking daily exercise. So far as personal observation goes, it does not appear that the officers of this fleet have taken exercise more regularly since General Order No. 6, January 4, 1909, was issued than was customary in the service. A few walks or rides may be taken before the tests. The tests themselves are of course designated to involve muscular work, but as usually taken from ships—the walk or bicycle ride—the effort becomes monotonous and, in lacking the pleasure one seeks in exercise, has ordinarily been made not only without enthusiasm, but also with some disinclination. There seems to be thus involved a disposition after taking the test to dismiss the entire subject from the mind as something disagreeable that will not require reconsideration for another year.

But just after the walk, for instance, there has appeared among many the natural inclination to express an opinion of the ease with which the work was done, and certainly a walk of 50 miles in twenty working hours does not appear in a general way to merit serious consideration. Yet, blistered and sore feet have not been uncommon and it is in the necessity to complete the walk under such circumstances and in the general monotony that is found the chief individual objections to the test. It is recognized that a man may be in good physical condition and yet, on account of some defect of shoe apparent only during the test or on account of feet not accustomed to that particular form of work, be less able to complete the walk than another in worse condition but whose feet are able to take the continued pounding incident to repeated tramps on a country road.

A naval officer's work afloat is often away from opportunities to engage with reasonable regularity in the form of exercise leading up to the tests required and general strength of body is not sufficient to prevent blistering or sore feet on a tramp, or the rub of a saddle during the 100 mile bicycle ride, especially the saddle of a hired bicycle which has been selected more or less at random.

As regular exercise leading up to the physical tests is not generally considered feasible and as such exercise on shore as is feasible is often considerably reduced by tropical cruising, there is a consideration of these tests, especially in their application to older men, that may be of no small importance.

Unusual physical work when beyond certain physiological limits is not beneficial to anyone. It has not been unusual for younger men, who perhaps have been in the Tropics for some time, to unduly show the effects of fatigue, and it is reasonable to think from a physiological point of view that under present conditions afloat the physical state of older men will in a general way be deteriorated by working the skeletal muscles beyond the power of the involuntary muscles to maintain coordination. Those same persons would be improved by regular exercise, but the tests represent unusual work not incident to their duties and their arteries are naturally losing elasticity on account of age just as the lens of the eye loses elasticity and necessitates the use of glasses by older men. In their cases irreparable results during or after a particular test would only be apparent very occasionally, but in the long run it is believed the tests, representing unusual effort, would be responsible under present service conditions afloat for more rapid deterioration.

Of course a naval service is not maintained in the interest of longevity and it may be contended that youth is too valuable an asset to be restricted by the older. Yet, one can recall that much of the highest work in our navy and in others, has been done by those who could not have been expected to carry out these tests.

Yet, while genius and physical strength are at least not in direct proportion and in naval life the same physical activity and endurance required in the lower grades has not been a prerequisite for the highest naval duties in later years, as a general proposition each person in the naval service should be in good physical condition. But these tests require as much from the older as from the younger, while, without the training leading up to them and by which the unusual becomes the usual, the older are apt to

have their deterioration hastened. And after all it is the good physical condition that is desirable and not an endurance test. An endurance test may leave a person in a temporarily depressed physical state and a watch officer going on duty after such a test is for the time less able to perform his duties than he was before, especially if his feet are sore. Yet, in this fleet there has been no recognition of permanent injury or anything more lasting than the loss of toenails incident to pressure from improper shoes.

As the tests prescribed have not seemed so far to promote the habit of regular exercise in those officers on duty in ships and as there should be such a habit so far as service conditions permit, there is suggested the alternative of attempting to lead rather than to drive. The habit should be encouraged during the months the ships are at the navy-yards and once formed would tend to be influential during the periods away from the yards.

The service could maintain a golf course, a number of tennis courts, bowling alleys and the like at each navy-yard, or where it may be possible. An officer would then know when ordered to a ship that he could take clubs and racket not merely with the possibility of using them, but with the assurance of opportunity to use them during the months his ship is detained at naval stations and that, too, without the loss of time incident often to long travel from a navy-yard to some country club to which he may have good fortune to have access.

Commandants of navy-yards and commanding officers generally could be instructed to encourage such sports by taking part in them or by other methods. Tournaments could be provided for beginners and others not making progress. A percentage of experts would be evolved and competitive games arranged, even in a number of foreign ports. The ordinary paraphernalia would be much in evidence on each ship and it would readily be regarded as good form to leave the ship at a navy-yard for a round or two of golf or a few sets of tennis. There could be a naval country club house at which there would be that sort of general gathering in the afternoon conducive to the popularity of open-air exercises. And all these things would be encouragement that differs materially from physical tests that have appeared more to drive than persuade. And with the recognition of the pleasure and good from special exercises there would be a greater tendency to use apparatus on the ship, such as chest weights, that often could be located by the service in the officer's stateroom.

A golf player is a walker and a tennis player has educated feet; and walking can be made the best of all exercises. But an officer who states he has played on the usual links a certain number of holes at golf, say 1,000 more or less in a year when on shore duty and 500 when attached to a ship, could be regarded as having the habit of taking exercise and could thus be excused from physical tests designed to cultivate such habit; and a certain number of sets of tennis, a game suitable for persons under 40 years of age, could be regarded as equivalent, a physical examination to be made each year in any event. If, for satisfactory reasons the full number of holes or sets were not played, an adjustment could be made by the addition of a recognized equivalent in walking or riding.

Such a method would not test endurance but would test fixity of purpose. With the habit of exercise established a test of endurance may not be considered advisable. It is often a test of ability to endure pain or take punishment and in that respect a naval officer is not behind others in his race. And if the tests are considered a test of endurance they have been met, even under present conditions; the failures in this fleet have been very few and in younger men from injured feet as a rule.

The surgeon of the navy-yard, Boston, made the following adverse criticism of the present test:

About 75 officers have been examined at this office before and after the physical test. Very few were found to have diseases so serious as to prevent them from taking the test or from completing it. None returned from the test in such a bad condition as to warrant the board replying in the affirmative to the question, "Is there evidence of exhaustion?" Yet very few returned without evidences of being temporarily used up and of having undergone severe physical suffering. It is to most of the officers, especially those of middle age and over, a severe strain. I can not see any good purpose accomplished by the physical test. In so far as the claim made for it goes that it is for the benefit of the health of the officers, in my opinion it is distinctly injurious to a large number of the older men, who are forced to undergo a severe physical ordeal, entirely at variance with the routine of their lives. It puts such an unwonted strain upon them that they are liable to break down under it and suffer permanent injury to their health. I believe that it amounts to the infliction of a physical punishment upon men who are guilty of no offense other than that of being officers of the navy, and that in its present form it does not accomplish anything

toward encouraging a more athletic life among the officers. I believe that it would be found in the case of many officers that the individual was unable to perform fully his regular duties for a longer time in the preparation for, in the taking of, and in the recovery from the test than he had ever been by sickness.

The medical officer on duty at the torpedo station, Newport, stated:

The purpose of General Order No. 6, namely, to cultivate and inculcate the habit of frequent daily exercise on the part of all officers of the navy, is not generally and systematically observed at this station. The circumscribed limits of the island do not permit of horseback riding, bicycling, or walking; and in the winter season night-fall supervenes so soon after office hours as to render these pursuits not altogether agreeable or practicable. It is respectfully suggested that a gymnasium fitted with simple appliances, as, for example, bowling, medicine ball, etc., for the use of officers and men, with prescribed periods for exercise, would promote the purpose of the order and be conducive to the maintenance of physical efficiency.

Senior medical officers at Puget Sound and Portsmouth, N. H., observed "that the older officers completed the test with comparatively less difficulty than the younger officers," and "that the older officers, at its end, were in better condition than those younger." This can be explained by the fact that the older officers pay more attention to preparation for the tests by preliminary riding or walking. It has also been noted that some of the officers but little beyond middle age have found it necessary to plan their routes so that they may partake of frequent refreshment and receive occasional rub downs by members of the Hospital Corps; these luxuries would hardly obtain in expeditionary service and are not believed to have been contemplated in the order. Probably the most prevalent difficulty has been caused by ill-fitting or inappropriate footwear, which further experience should rectify.

The medical officer of the *Tacoma* reported from the point of view of a ship stationed in the Tropics where the military situation and cruising conditions precluded much shore going:

From a general inspection of the officers attached to this ship, I do not think there are any who can not complete successfully one of the tests given in Navy Department General Order No. 6 of January 4, 1909.

It is evident that these tests do not accomplish what they are supposed to do; that is, by constant exercise keep an officer in condition so that he will be able to do them at any time called on. Many officers are so situated that they are unable to obtain the time for this exercise, or to practice up if necessary.

I do not think that officers should be called upon to do this test unless a favorable opportunity presents. Ships in tropical countries should be excused, as it is certainly antagonistic to the good health of any officer to compel these tests under the intense heat and frequent rainstorms and humidity of the Tropics.

From the report of the naval station, Culebra, the following is taken:

The officers attached to this station complied with the executive order relative to taking the physical test. On the whole, the strain on the system was much more marked than that observed in officers who had taken the test in a cooler climate. Two of the officers suffered from heat exhaustion while taking the walking test. It is my opinion that some distinction should be made between the test required of officers taking it in the Tropics and in cooler latitudes. Then, too, officers in the Tropics should not be allowed to take the test except during the cooler months of the year.

Physical defects noted in examination preliminary to test.

Number taking.	Number not taking.	Defects noted.
6		Abrasio.
24		Albuminuria (1 complicated with varix; 1 complicated with varicocele).
		Ankylosis (partial).
1	1	Arteriosclerosis (1 complicated with hernia).
	1	Cartilaginosis intra-artic. (dislocatio).
1		Catarrhus gastricus acutus.
1		Cholelithiasis.
1		Constipatio (1 complicated with hemorrhoids).
	1	Cordis dilatatio.
1	2	Cordis palpitatio.
19	6	Cordis valvularum morbus (1 complicated with hernia).
1		Cystitis.
3	1	Deformitas.
	2	Diabetes.
1	1	Dysenteria.
1		Emphysema.
1		Gonorrhoea.
15	1	Hemorrhoids (2 complicated with hernia; 2 complicated with pharyngitis; 1 complicated with constipatio).
1		Hepatitis suppurativa.
26	9	Hernia (2 complicated with hemorrhoids; 1 complicated with tuberculosis; 1 complicated with varicocele; 1 complicated with albuminuria; 1 complicated with arteriosclerosis; 2 complicated with varix; 1 complicated with diabetes; 1 complicated with cordis valvularum morbus).
	2	Nephritis chronica.
	2	Neuralgia.
	2	Neurasthenia.
	1	Obstructio intestinalis (chronica).
1		Orchitis.
3	1	Pes planus (1 complicated with varicocele).
2		Pharyngitis (2 complicated with hemorrhoids).
9		Relaxed inguinal rings.
4	7	Tuberculosis pneumonica (evidence) (1 complicated with hernia).
13	1	Varicocele (1 complicated with albuminuria; 1 complicated with pes planus; 2 complicated with hernia).
20	1	Varix (1 complicated with emphysema; 3 complicated with hernia; 1 complicated with albuminuria; 1 complicated with varix).
	2	Vertigo.

Unfavorable symptoms observed following test.

Number taking.	Symptom.	Number taking.	Symptom.
4	Albuminuria (trace).	1	Exhaustion and swelling of feet.
4	Albuminuria increased.	3	Heat exhaustion.
1	Aortic systolic cardiac murmur.	1	Intermittent pulse.
1	Cardiac murmur developed (temporary).	1	Irregular pulse.
1	Cardiac murmur increased.	1	Nausea and vomiting.
1	Descended hernia and prostration.	4	Weak pulse and exhaustion.

There yet remains to be considered the question of specialism and competition in athleticism, either on the part of individual or team contestants. Up to the present time no statistical study of longevity and period of active service of former athletes among naval officers has been made; a comparison of the service records of such officers as specialized in athleticism during the formative period of their lives with those of the average for each corresponding year of appointment to the service would seem to promise some assistance in declaring the medico-military aspects of athleticism. Basing opinion upon data obtained by investigators in this country and in Europe it is the prevailing belief of medical authorities that participation in the customary contests is not only unnecessary for the development of the best physique, but that the average man who is more rationally and evenly developed by conservative but recreative

gymnastics without the undue enlargement of heart muscle which commonly follows specialism in football and rowing will live longer, be more resistant to disease and thereby be enabled to render more service.

The navy, the individual, and the civil community from which the prospective officer is appointed each can rightfully demand that if athletic contests are to be permitted, and particularly if they are to be encouraged by official dispensation and the moral support of thousands of spectators, the immediate danger to life and limb shall be reduced to a minimum which certainly has not yet been reached. The changes in the game of football have perhaps rendered it slightly less perilous, but in the main the following conclusions of Nichols and Smith of Harvard, reached after the 1905 season, still apply:

The authors present the following conclusions: (1) The number, severity, and permanence of the injuries which are received in playing football are very much greater than generally is credited or believed; (2) the greater number of injuries come in the "pile" and not in the open plays, although serious injuries are received in the open; (3) the number of injuries is inherent in the game itself, and is not due especially to close competition, as is shown by the fact that the proportion of injuries received in games and in practice is about the same; (4) a large percentage of the injuries is unavoidable; (5) the percentage of injuries is incomparably greater in football than in any other of the major sports; (6) the game does not develop the best type of men physically, because too great prominence is given to weight without corresponding nervous energy; (7) constant medical supervision of the game where large numbers of men are engaged is a necessity and not a luxury, although it is a question if a game requiring the constant attendance of two trained surgeons is played under desirable conditions; (8) the percentage of injury is much too great for any mere sport; (9) leaving out all other objections to the game, ethical and practical, the conditions under which the game is played should be so modified as to diminish to a very great degree the number of injuries.

Competitive sports are, however, not compulsory, and after the minimum dangers and doubtful advantages have been pointed out by medical advisers and instructors in physical training, participation may still be left to the individual's decision even if his youthful judgment is somewhat discredited. The expression "once an athlete always an athlete" should be thoroughly impressed, for a heart given a large amount of work to perform increases in size as does any other muscle and when later comparative disuse occurs, degenerative changes may be expected with corresponding susceptibility to disease and failure to meet the unprepared-for service emergency.

It may be confidently contended that in any given group of midshipmen who have specialized in athletics at the Naval Academy and entered upon a career of comparatively restricted regular physical exercise an ultimately higher admission rate for tuberculosis will be found than among their confrères who in addition to the regular physical training satisfied their need for physical recreation in gymnastics, tennis, and other moderate exercises.

All conditions of modern ship life favor an entire change in the young officers' physical habits when they are assigned to their first sea duty after graduation, and those who have been the more athletic are quite as prone to abandon their exercise and adapt themselves to the less active environment; these men have more heart muscle and vital capacity to fall into disuse, and tubercular infection is less readily resisted, while within a few years a serious illness may find a degenerated heart muscle unable to withstand the strain.

Mental strain incident to student life does not require intense physical exercise—moderate physical recreation will far more readily relieve brain fatigue and restore mental vigor.

On August 15, 1910, it was found proper to address the following communication to the department:

General Order No. 6 (Jan. 4, 1909) was intended to cultivate and inculcate "the habit of frequent daily exercise on the part of all officers of the navy." After eighteen months it has been plainly demonstrated that the objects sought for have not been attained. On the other hand much harm has been done the service through the enforcement of this order. Many officers of marked ability, perfectly able to perform efficiently the duties of their respective grades, have been physically damaged to the extent of rendering them unfit for duty, and in some instances life has been materially shortened.

The importance of exercise intelligently modified to meet the physical conditions existing at the different periods of life is fully recognized and appreciated. Exercise should be moderate at first, continuous and progressive, and also under careful medical supervision. One of the most accomplished officers in the service, whose ability to perform his duty at sea in high command has been fully demonstrated and who now occupies one of the most important posts in the naval service, is suffering from dropsy, shortness of breath, and other complications associated with a dilated heart, which followed after taking the prescribed physical test.

A test that is perfectly appropriate for the period between 20 and 30 years of age may be physically hazardous to individuals between 50 and 60 years of age, not only in some cases shortening life, but absolutely imperiling it. A test of this sort required to be engaged in but once annually is not destined to induce a habit of daily exercise on the part of officers.

Such officers as are fortunate enough to have the means and leisure to indulge in horseback exercise, or golf at remote country clubs, habitually, have found little or no hardship in carrying out the test. There are also officers whose physical fitness makes the endurance test a matter of little concern to them, who, on the other hand, are in the doubtful class professionally. Then, too, there are officers many years of whose lives have been given to the promotion of the best interests of the service, who have spent long periods at sea, and while on shore have subjected themselves to the close confinement of exacting administrative duties, to whom the physical test is a matter of real anxiety, as it presents to them the probability in case of failure of hazarding their careers in the service or the possibility of permanently damaging or seriously imperiling their health. In other instances, the training necessary for properly preparing for the test and the actual time and effort required to carry it out have provoked a spirit of irritation and resentment which is not calculated to stimulate a pleasurable contemplation of regular physical exercise. It hardly seems fair to require senior officers serving in the Tropics to indulge in the same physical test as those who are serving in cooler climates and under more favorable conditions. There are on record at least 20 cases of officers whose health has been more or less seriously impaired and fully as many others of whom no official record has been obtained.

General Order No. 6 provides that officers, preliminary to taking the physical test, shall be examined by a board of medical officers to determine their physical fitness to indulge in this test. The order further provides that in case they are found physically unfit to indulge in the tests they shall be ordered before a retiring board. In several instances it has been found that officers were considered unable to indulge in this test and they were accordingly ordered before retiring boards. In some cases these boards reported that the officers were physically fit to perform the duties of their respective grades, but not physically fit to indulge in the physical test. They have been excused from taking the test and are now on duty.

* * * * *

Quite within the range of good health and the normal, come physical changes with advancing age, which in no way mar the efficiency to satisfactorily perform the duty to which an officer may be assigned with increasing years. The eyesight, for instance, for near vision begins to fail in middle life. Why not require a senior officer to read print without glasses at the near point assigned for the youth of 20? The great responsibilities are mental rather than physical with advancing years, and it is then that ripe judgment which can come only after long experience is the greatest asset. The physical features of the individual are positively secondary.

In view of the foregoing, the bureau respectfully recommends that the physical test as now ordered be abolished, and if a stimulus to keep officers up physically be deemed necessary, have it so planned that it will not endanger life or cause invalidism, thus

removing from the service of the Government officers of signal worth, who, in all probability, would have been able to meet all the demands of war, and if unable to do so would have cheerfully accepted any consequences that might follow while serving their country in the manner for which they were trained.

The bureau suggests that an "exercise period" for physical betterment be required of all officers once each quarter. Before the period in the first quarter officers should appear before a board of medical officers who will determine upon their fitness to take this exercise and report upon their condition upon its completion. This physical examination should take place but once annually. Each officer would be required to walk 25 miles in two consecutive days, four consecutive hours being allowed for each day and the walk for each day not to be completed under three hours. This physical exercise is sufficient and often enough repeated to impress upon officers the advisability of acquiring the habit of walking, of taking proper care of their feet, and will serve to bring home to them the importance of selecting well-made and properly fitting shoes. It would, without doubt, be possible to pick out two days of good weather. The exercise might be begun, say at 2 o'clock in the afternoon and be completed by 6 o'clock. Officers would be inclined in preparation for these exercises to walk to and from their stations or places of duty. The suggested exercise is scarcely arduous enough to provoke resentment or cause irritation, and is quite as much as would be required of them in an expedition on shore with troops. In the Tropics and under other unfavorable conditions the senior officer, after consulting the senior medical officer, should be authorized to modify the exercise to suit the environment.

The bureau has in contemplation a system of physical training which, after adoption, will without doubt be indulged in pleasantly and with satisfactory results, and it will minimize whatever difficulties may be encountered in preparing for the suggested plan of exercise. It is believed that many officers of conspicuous ability will be saved to the service and their physical condition will be improved, whereas if the present physical test be continued, many of them will be lost to the service and possibly their lives shortened if not absolutely imperilled.

INSANITARY CONDITIONS PREVAILING FOR PERSONNEL OF SHIPS.

Undergoing repairs.—The department's attention is again invited to the need of barracks at the various yards of sufficient capacity to accommodate the crews of one or two ships which the present arrangement for home-yard repairs contemplates. The various arguments have been fully stated in the reports of this bureau for 1907, 1908, and 1909, and need not be repeated. Experience shows that contagious disease usually spreads while a ship is at the yard, the infection being received from exposure ashore or from recruits received from training stations. The training stations on the Atlantic coast have not been such great sources of contagion to the fleet as formerly for the reason that segregation has been more consistently enforced. The San Francisco Station has proven as infectious to the fleet as ever. The rational solution of the repair-yard problem would seem to be, wherever land is available, the development of extensive segregation barracks on the unit system of plain and as simple construction as climate will permit to replace receiving ships and furnish additional space for the personnel of ships undergoing repairs. Commissary, heating, lighting, and sanitary facilities would thus be continuously in operation from a common source. The type advocated by Rear-Admiral A. C. Dillingham, U. S. Navy, meets the indications very well. In this connection a disinfecting plant such as was installed at the Philadelphia yard a year ago should be provided for each repair station.

As the number of dry docks and ships requiring docking increase, references to the sanitary conveniences for the personnel occupy more space in reports with recommendations for extensive bathing and toilet facilities in permanent outbuildings. In the case of future docks it would appear to be a far less expensive solution of the problem

and require less valuable space to install cisterns outside, with portable connections with the ship's scuppers through the sides of the dry dock. The sanitary arrangements for a thousand officers and men would thus not be interfered with. It is commonly noted that throughout the time in dry dock men are prone to neglect bathing and the calls of nature because of the distance from their work and inadequacy of sanitary arrangements. The contents of the cisterns could be pumped either into sewers or into the stream outside the caisson as local conditions dictated.

Clothing.—There have been but few complaints and suggestions from the point of view of sanitation of clothing of enlisted men, and these have been referred to the bureaus of Navigation and Supplies and Accounts.

One of the medical officers on duty with the 1909 "practice cruise" reported:

The practice carried out by midshipmen of wearing each other's clothes should be discouraged.

The undershirt worn by midshipmen on the cruise is not adapted to the working uniform, as it buttons up the front, the material, besides, being very thin.

There appears to be an increasing demand for some hat which will afford better protection for the head, eyes, and neck on ships and shore in the Tropics. The medical officer on duty for two years with the navy rifle team advocated the authorization of a more suitable uniform as follows:

During the preliminary practice of the navy rifle squad last summer at Wakefield, Mass., the members of the squad were permitted to wear the marine campaign hat, khaki trousers, and a blue or white service blouse. In all matches, however, they were required to wear the regular navy uniform, by order of the department.

Just as soon as the campaign hat was discarded for the white service cap the members of the squad began to exhibit symptoms due to lack of protection from the sun's rays. Headaches were of frequent occurrence, while nausea, loss of appetite, and symptoms of general prostration were not infrequent. The white service cap affords so little protection from the sun's rays as to be practically worthless.

Blue uniforms are not suitable for the Tropics, and in more northern climes during the summer months they are too warm; they can not be washed when they become soiled or saturated with perspiration; they are too expensive. White uniforms are not suitable, for a man dressed in white is altogether too conspicuous an object in a hostile country; it is absolutely impossible to keep them clean or presentable in the field; they easily become saturated with perspiration during the heat of the day, and drying rapidly as they do in the evening are apt to cause chilling and discomfort, if not illness, to the wearer.

I would suggest the following uniform for landing parties or for any special duty for men in the field and who have to live in tents: Khaki or olive drab breeches for the officers and trousers of the same material for the enlisted men. Khaki-colored or olive-drab woolen shirts with proper devices to indicate the rank or rate of the wearer. English flannel wrap puttees for the officers and brown canvas puttees for the enlisted men. These flannel puttees are cooler, lighter, and much more comfortable than the leather puttees.

Tan shoes similar to those issued to the enlisted men in the Marine Corps would serve very well. For head gear I would suggest a modification of the marine campaign hat. The crown should be moderately high and ventilated at each side. The brim should be slightly wider, flat, and possess enough stiffness to retain its shape.

The superintendent of the Naval Academy stated that in his opinion "something should be done in this direction, and these recommendations appear worthy of trial."

For expeditionary and tropical service a color, such as drab, gray, or khaki, which would be practically indistinguishable from man-of-war exterior, earth, and vegetation, would seem to be indicated from a medico-military point of view, but the characteristic in which the

sanitarian is most concerned is a washable material for practically every article of wearing apparel of men and service dress for officers. It is common knowledge that white uniforms worn for several days in the absence of laundry facilities show the accumulation of much dirt, and the amount acquired by the blue and usually unwashable garments may be readily conceived; to meet these ends simplicity in design and detachable insignia of rank would be contributory. If blue must be continued for cool climates undoubtedly a heavy dark "pongee" would fulfill requirements for tropical service far better, and if procurable from government stores with no greater expense than the present starch-impregnated white linen duck.

Smallpox and typhoid vaccination.—The epidemic diseases calling for particular mention here and discussed more fully in the following section are smallpox and typhoid fever, and it is fitting that they should be mentioned together, for the reason that vaccination, which has been so efficacious in the control of the former, promises important even if less certain protection to the military services from the latter disease.

One or more reports continue to be received each year, indicating that regulations have not been sufficient to insure the vaccination of every recruit and, if necessary, repeated vaccination with virus of assured potency. For this reason, and while the cases of smallpox which prevented the *Washington* from joining the special-service squadron at Buenos Ayres were still in mind, General Order No. 64 was issued to prohibit the transfer of any recruit of the Navy or Marine Corps from a training station, receiving ship, or barracks, or other rendezvous until he shows satisfactory evidence of having at some time been successfully vaccinated, the fact being noted on the health record. If further experience proves that this provision is still inadequate it will be necessary to require the vaccination of all recruits at the time of enlistment and the fact as part of the medical officer's certification upon the enlistment record.

The report of the *Cleveland* stated: "It was discovered that many of the crew had never been vaccinated, and some never successfully vaccinated."

The commander in chief of the United States Pacific Fleet under date of March 15 directed attention to—

the record from the *Maryland*, which is as follows: (a) All officers and men vaccinated twice within last twelve months, the last time December, 1909; (b) Nevertheless, in February, 1910, there were 122 persons, or about 13 per cent of the complement, who did not show evidence of successful vaccination at any time; (c) those 122 persons when vaccinated last month furnished about 10 per cent of success, and the remainder have again been vaccinated.

English, German, and American military statistics and experiences point with increasing certainty to the advisability of adopting typhoid vaccination for the protection of persons likely to be exposed to infection, and inasmuch as the admission rate for typhoid fever is higher in our service than in the United States Army or in armies and navies of other nations who are taking an active interest in typhoid vaccination, further delay in urging its use on such stations as are shown by annual experience to suffer from the disease habitually rather than accidentally would indicate an indifference almost as culpable as characterizes the communities which convey the infection commercially to our visiting personnel. Further observa-

tions may properly be awaited before requiring compulsory vaccination of all officers and men, yet since any one may be exposed at some time the logical aim should be to eventually vaccinate all under the age of 50 who have not had the disease. Through the courtesy of the Surgeon-General of the United States Army, the bureau has been enabled to meet requests for vaccine during the present summer, where in the opinion of medical officers local endemicity urgently demanded the measure. During the month of June, 1910, 97 officers and men each received two doses of the vaccine at the naval station, Key West, Fla. As pointed out by Surgeon Butler in last year's report, a separate establishment for the safe manufacture of the vaccine would be required if the navy were to provide its own supply; however, there would appear to be no adequate reason for the duplication of such a plant as the army has in Washington, so long as its facilities are so liberally extended.

Venereal prophylaxis gradually achieved widespread recognition throughout the year 1909 as a measure legitimately designed to diminish the greatest damaging disease group from which the personnel suffers. An excellent beginning had been made on the Asiatic Station in 1908, so that the campaign was waged on the majority of the ships of that squadron during the four quarters of 1909, although the *Monterey*, *Rainbow*, and *Callao* were not included until the second quarter and the torpedo flotilla, *Wilmington*, *Villalobos*, and *Samar* did not fall into line until the third quarter, and the shore stations during the fourth quarter. For statistical purposes it might be deemed fortunate that a realization of the importance of admitting all cases was brought to the attention of every medical officer on blank forms before the prophylaxis became more universally adopted, for we are now shown for the first time, without resorting to ratios based upon the number of cases of syphilis or gonorrhœal rheumatism, directly from the returns that the primary admission rate (160.40) begins to approximate that of the army for 1908, which was 174.84. At any rate the prominence which preventive measures have given the subject seems to have relation to a fuller recording of cases, so that the apparent primary admission rate as shown by returns jumped from 91.81 in 1908 to 160.40 in 1909. The unreliability of the figures for 1908 are well indicated by the one case of gonorrhœa on a ship of the size of the *Cleveland*, while 51 were shown for 1909; similar divergence is shown by the reports from the *Helena*, *Wilmington*, *Villalobos*, and torpedo flotilla. A fairly consistent estimate might now be ventured that the true incidence of primary venereal infections is not far from 200 per 1,000.

Following the publication of the various methods and results attained on all types of ships in the Naval Medical Bulletin, the medical officers of the battle ships of the Atlantic Fleet are now enabled to attack the problem vigorously through the authority and support implied in a circular letter of the commander in chief to the commanding officers, dated May 22, 1910. That venereal prophylaxis is not likely to succeed on any ship or fleet in the absence of disciplinary measures for those who fail to comply was observed by Medical Inspector Diehl of the Asiatic Fleet, who stated:

The cooperation and support of the commanding officer are, however, absolutely essential. Severe disciplinary action will soon reduce the percentage of those who fail to report, deny exposure, or conceal disease.

In the presence of an increasing admission rate for the entire service, due to the recording of a higher percentage of all cases, obviously the Asiatic Station should be the first one to systematically show the turning point toward a reduction from the increase of 60 per cent of 1909 over 1908. Happily, this turning point may already be indicated by a recent communication from Fleet Surgeon Diehl, as well as by the monthly summaries of reports on prophylaxis forwarded to the bureau:

The following tabulations, compiled from Forms K that are available, show the number of primary admissions at the stations and on board the ships on this station for the third and fourth quarters, 1909, and the first quarter, 1910. In the absence of an authorized fleet surgeon, Forms K were not filed during the first two quarters of 1909.

	Third quarter, 1909.	Fourth quarter, 1909.	First quarter, 1910.
Charleston.....	34	33	26
Chattanooga.....	9	12	10
Cleveland.....	22	8	13
Helena.....	28	35	31
Rainbow.....	24	10	7
Samar.....	3	5	1
Torpedo flotilla.....	25	5	15
Villalobos.....	10	24	8
Wilmington.....	22	26	15
Mohican.....	3	7	6
Arayat.....	1	0	0
Callao.....	2	4	3
Mindoro.....	1	0	3
Monterey.....	22	11	6
Paraguá.....	0	3	1
Naval Station, Cavite.....	17	10	15
Naval Station, Olongapo.....	47	45	36
Total.....	270	238	204

The figures for the above 17 ships and stations (all from which reports were available at date of writing) show an approximate reduction of 20 per cent in admissions during the first quarter, 1910, as compared with the average of the third and fourth quarters of 1909.

Recent transfers and changes in the Hospital Corps and personnel generally will probably be a disturbing element in the scheme, and the results may not be as good as hoped for. The slightest relaxation in persistency and thoroughness makes an appreciable difference in the percentage of success, and constant effort will for some time be necessary to keep everyone interested in the scheme. The personal equation of the medical officer and his subordinates is an important factor, which fact I have endeavored to emphasize in my report. Of the great benefits of the prophylaxis there is no doubt, although it has so far been impossible to prove it by figures. Until we are absolutely certain that all cases are recorded and that disease is not concealed, no fair comparison can be made.

Of one fact I am positive. The cases of gonorrhœa and chancroid that occur on board the *Charleston*, in spite of prophylactic treatment, are attended less frequently by complications, and we have had quite a reduction in the number of cases of epididymitis and adenitis, and I think the same is true of other ships on this station.

The percentage of "denials of exposure" was 67.75. There has been a constant monthly increase of this percentage, and this, or what amounts to the same thing, a steady diminution of the number admitting exposure, may have some ethical significance. The prominence given to the question of venereal disease by commanding and medical officers, the talks on personal hygiene, the institution of the prophylactic scheme in itself have, in the writer's opinion, been beneficial by bringing the better class of men to a greater realization of the evils frequently resulting from exposure, and by stimulating a latent moral sense. In any event, there is no reason to think that a sense of security engendered by the scheme has caused any increase in indul-

gence. The claim that the scheme will cause a great number of concealments of disease has also been refuted on the *Charleston* by a recent examination of the entire crew, not a single case of concealed disease being found.

It may be predicted without extravagance that because other ships and shore stations, with certain praiseworthy exceptions, have assumed these activities approximately a year later than did the Asiatic Station the admission rate for the entire service will be very high for 1910, but that two years hence the rate shown for 1911 should unquestionably prove that the battle against the venereal peril is a decisive one.

SPECIAL DISEASES.

Appeal is made to all in authority to make at least a casual study of the vital statistics of the naval service, for the reason that there are few indeed who do not either directly or indirectly have it in their power to render material assistance in diminishing physical disability, which means increasing military efficiency. A considerable mass of statistical material of annually increasing reliability is offered upon which consideration by many is desirable for thorough and judicial interpretation, particularly in respect to the subjects of less apparent significance. With this in view Tables 2 to 7 have been amplified by a column to show the rates for primary venereal admission to show which ships and stations suffer most from this class of preventable affections and awaken the local response needed; the recruiting table on page 113 has been extended to declare the recruiting stations which furnish the highest proportionate number of physically undesirable recruits; Table 20 is continued to show the number and nature of infections and contagious diseases which prevailed on board ship; Tables 7, 9, and 11, and 8, 10, and 12 have been combined into Tables 17 and 18, respectively, to facilitate the determination of total case reports for disease groups and individual affections for the entire service, and finally, Table 19 has been compiled with months of painstaking labor to show at once in the order of their admission rates the prevalence of important disease and injury groups reported for each occupational division of the personnel and the total sick days and damage sustained with much greater thoroughness than has heretofore been attempted. As will be noted, 37,761 days of noneffectiveness are accounted for in addition to the 578,302 sick days shown by routine returns from ships and stations. Certain inaccuracies and leaks still persist which can not be entirely eliminated until the clerical force of the bureau is permanently increased by one or more men experienced in coordinating the 1,250 quarterly abstracts and statistical reports now received.

It is unfortunately evident, for example, that patients are frequently invalidated from ships and distant stations to hospitals with diagnoses of pneumonia or typhoid fever, which should be tentative, only to have the diagnosis changed to meet the development of subsequent observations and yet the original admissions remain and improperly swell the number of cases of such diseases. A considerable number of incurable cases are unfortunately reported as "discharged to duty" for the purpose of change of diagnosis or transfer via another ship to a distant hospital for terminal disposition by discharge from the service or perhaps by death, and, more

often than not, an officer is "discharged to duty" to go before a board for retirement. As intimated in a previous section it is designed to remove these inaccuracies by analyzing and following up all transfers of patients, by adding three disposition columns to the quarterly statistical reports, by obtaining, whenever possible, reports of cases treated in other than naval hospitals more comprehensive than the bills, which may not even state the number of sick days or the character of the disability treated. It is only by the complete and accurate accountability of the distribution, nature, and strength of our enemies to sanitation that we can hope to effectively and economically overcome them.

A logical sequence for the consideration of special diseases was undertaken in last year's report, and its method merits continuance for the present.

A. *Affections which depend upon probable predisposition.*—Three hundred and thirty cases of hernia disposed of during 1909 caused 12,945 sick days and 63 discharges from the service, with a computed damage of 67 individuals noneffective throughout the year. The sick-day rate is approximately the same as for 1908, while the number of discharges was reduced just 40 per cent. Rupture occurring in individuals under middle age is doubtless almost invariably attributable to conditions existing prior to enlistment, and the cure of 439 cases out of 444 by operation with no consequent deaths during the last two years ought to justify compulsory operation in every instance in which there is no contraindication from age or concurrent constitutional disease; unfortunately there exists the precedent of judicial decision to the contrary.

The admissions and sick days for hemorrhoids and varicocele increased about 15 and 12 per cent, respectively, but invaliding from the service by reason of these disabilities diminished 47 per cent from the record of 1908. Evidently medical officers are approaching the view recently expressed by leading British observers that varicocele is seldom the physical disabling condition represented; while 100 per cent of cures may be registered in the navy following surgical operation because the wounds heal and the patients return to duty, if we are to reconcile the statistics of Barney for permanent relief of the mechanical defect, it must be with the conclusion that naval surgeons are peculiarly fortunate in relieving the psychic symptoms. Disability and invaliding for palpitation of the heart, which develops in about two recruits out of each thousand, maintained approximately the same ratio as for 1908.

Admissions for astigmatism, short and far sight comprising the chief congenital visual defects of the service nearly doubled those of the previous year, but that this is not due to greater prevalence or laxity in physical examination upon entry to the service is shown by the fact that the invalids were reduced 19 per cent; the assumption is justified that the greater number of cases recorded is due to the exercise of greater care in refracting the less marked cases, particularly among the midshipmen at the Naval Academy, who, as will be noted in Table 19, furnished 30.8 per cent of all the eye affections of the service and in whom the admission rate was more than 21 times as high as the average for the entire service.

The prevalence of enlarged tonsils is scarcely shown by the tables, inasmuch as an unknown number of cases are returned as tonsillitis

which are included under contagious diseases for purposes of discussion. Removal of tonsils is recorded 84 times as compared with 70 for 1908. There were but 4 invalidings for tonsillar disease, with 1 for the preceding year, which indicates that despite 3,462 admissions and 17,162 sick days, such disability is seldom considered as permanent.

The one pronounced physical defect which appears to be found more commonly among recruits than in former years is flatfoot, there being no less than 104 invalided from the service for that condition last year; this deformity is well known to be almost the rule among colored applicants and probably in their usual duties seldom gives rise to much disability; it is, however, quite a different matter among marines who manage to be reported as physically qualified by civilian examiners, particularly those whose stations are tributary to Philadelphia and Mare Island; many pronounced cases have been surveyed at both of these stations and the brigade surgeon recently on duty with the expeditionary forces in Central America found flatfoot among marines a serious disability in marching; this officer's report led to the issue of General Order No. 53, from Headquarters United States Marine Corps, the first three paragraphs of which should be of peculiar interest to all who have to do with marine recruits:

1. Of the expeditionary brigade sent to Panama and Nicaragua in December last, 8 enlisted men, within two months from the date of departure from the United States, had to be surveyed for flatfoot. Because of this condition they were unable to do ordinary guard duty and could not have accompanied their respective detachments on the march, nor have participated in any other arduous service that might have been required.

2. While the physical defect above mentioned should have been detected on examination for enlistment if it then existed, it is quite possible that it may have been acquired since enlistment, and it is evident that had the men concerned been required to engage in practice marches at their home stations said defect would have been discovered and men physically so deficient would not have been sent into the field.

3. It is therefore directed that hereafter whenever practicable practice marches be held regularly at all posts, said marches to be of such frequency and the details of men therefor to be so made that each member of the command will participate in a practice march at least once in two weeks. The initial march shall be of such length as may, in the opinion of the commanding officer, be necessary; subsequent marches to be lengthened until the men become well "hardened."

Admissions and invalidings for epilepsy were about 30 per cent lower than for 1908. Sixty-three of the 79 admitted were discharged from the service during the year and in some of the others the diagnosis appeared to be incorrect or too uncertain to merit such disposition; the sick days numbered but 1,841 as compared with 3,096 for 1908.

Middle ear disease (with deafness), tuberculosis, and potential insanity are the three remaining conditions for the detection of which medical officers should be constantly alert; they receive more particular notice in the following pages.

Recommendation made in last year's report for the inclusion of denial of incontinence of urine, any previous attack of appendicitis, and family history of nervous or mental disease is again urged.

B. *Affections depending upon the environment of recruits.*—Table 19 indicates that contagious diseases are far more prevalent among those who have recently entered the service, apprentice seamen, midshipmen, marines, and coal passers; the admission rate has been materially reduced only for the more serious contagions, while for the group

the rate increased from 112.88 per thousand for 1908 to 126.57 for 1909. The total damage in terms of individuals disabled throughout the year dropped, however, from 231.21 to 206.16. Diphtheria dropped from 88 to 29 cases, cerebro-spinal meningitis from 28 to 11; pneumonia from 302 to 205, epidemic catarrh (influenza) from 1,422 to 1,225, mumps from 1,092 to 961, and itch from 337 to 324 cases; the sick days due to itch were 16 per cent lower than for 1908. Measles showed a slight relative increase of 89 cases and scarlet fever of 12 cases over the figures for 1908. The admission rate for tonsillitis was 51.2 for 1908 and 61.2 for 1909.

As pointed out a year ago, the San Francisco Training Station continues to furnish a high admission rate (13.1) for pneumonia as compared with the two other training stations, Newport 7.4, and Norfolk 2.8; the admission rate for contagious diseases at San Francisco was 410 per thousand, the rate for Newport 245.9, while that for Norfolk was but 188.1. Inasmuch as the total damage from contagious diseases incurred by the active force of the navy is only exceeded by that of venereal diseases, and as these affections are most prevalent among recruits, the logical conclusion is that this damage should be reduced by the transfer of training stations to more healthful climates or social environment. The training station on the Pacific coast from both sanitary points of view should be located south of Point Concepcion. The chances of a naval recruit developing venereal disease seem to depend very largely upon the location of the training station to which he is sent. The admission rates for all venereal affections during the year 1909 were 75.6 per thousand at Newport, R. I., 124.4 at San Francisco, and 331.6 at Norfolk, Va., as compared with 199.2 for the entire service. Following representations made by the bureau, a system of instruction and voluntary prophylaxis has been established at San Francisco, with resulting decrease of 20 per cent in primary admissions, and at Norfolk the commanding officer of the training station stated, on April 20, in response to inquiry, that "a room is now being fitted out for the purpose, and when completed a system of compulsory prophylactic treatment will be inaugurated." Surgeon Stepp, who recently served as senior medical officer at the Norfolk Training Station and made recommendations upon which this work is undertaken, is of the opinion that the suggested transfer of the station to the site of the Jamestown Exposition would be of decided sanitary advantage.

The environment of Newport seems either to have been unusually good or uncommonly well guarded against, as reflected in disease statistics for the past year, and this may have compensated somewhat for the rigorous climate; there occurred but 14 cases of pneumonia at Newport as compared with 36 for 1908.

But 26 cases of tuberculosis developed at training stations during 1909 as compared with 33 for the previous year. Admissions for mumps were 1,392 in 1908 and 961 in 1909, while for the latter year the sick days were about 17 per cent fewer.

C. Affections depending upon ship life.—On board ship epidemic catarrh and acute bronchitis contributed but 1,189 admissions as compared with 1,337 for 1908, and the sick days were reduced from 7,498 to 5,517, although but 3 more patients were transferred to hospitals; influenza reached moderately epidemic proportions on the

following ships, with the number of cases indicated: *Albany*, 23; *Connecticut*, 30; *Des Moines*, 28; *Galveston*, 31; *Montana*, 29; *Nebraska*, 45; *New Jersey*, 43; *Rhode Island*, 25; *Tennessee*, 85, and *Virginia*, 26.

Tonsillitis was more prevalent afloat, particularly on those ships not supplied with the bubbling spring terminals on drinking fountains; the department's order of April 15 to install this device on all ships of the Atlantic Fleet should effect a material reduction in disease traceable to transmission by the common drinking cup, which was practically never adequately disinfected by immersion in the tray of formaldehyde solution. Other contagious diseases occasioned but 720 admissions to sick list afloat as compared with 973 for 1908. Measles appeared in 37 cases on the *Buffalo*, 16 on the *Missouri*, 14 on the *New Jersey*, 18 on the *Pennsylvania*, and 11 on the *Tennessee*, the report from which states:

As measles was prevalent among several ships of the fleet at Bremerton, by fleet order a general disinfection of bags and hammocks was made. On this vessel, in addition, the crew was inspected daily for the early signs of measles. The throats were examined; palates reddened or spotted, spots on buccal mucous membrane, lacrymation or sudden coryza were regarded as suspicious signs; if further examination showed pyrexia the case was isolated. If no fever was present the case was still considered suspicious and kept under observation, but not in isolation, for four days. It was found to be impossible to positively differentiate early signs, such as Koplik's spots, from other similar conditions of the mucous membranes, but it is interesting to note that, of the total cases occurring during the period in which the inspections were made—June 26 to July 14—two were undiscovered before the eruption stage. These two were special duty men who were not subjected to the examination.

There were 10 cases of mumps on the *Albany*, 28 on the *Minnesota*, 17 on the *Montana*, 16 on the Pacific Torpedo Flotilla, and 34 on the *Virginia*. The *Missouri* was the only cruising ship to experience an epidemic of scarlet fever, 10 cases being reported. The senior medical officer showed in his annual report how the disease was stamped out without removing the crew or repairing to a quarantine station:

The scarlatina appeared while the ship was at Boston in March. At that time Boston and vicinity was badly infected, and about three weeks prior to the appearance of the first case a draft of men had been received from Newport, but the infection could not be traced to them.

When it was determined that a focus of infection had been established on board, the ship was quarantined, the men and the ship scrubbed, while their effects were disinfected, aired, and fumigated thoroughly and repeatedly. In about a month we were entirely rid of the infection with a total of 13 cases, counting those which developed on leave and those sent to hospital as suspects and diagnosed there. There were no deaths and no serious results.

The returns fail to show any epidemic of diphtheria or cerebrospinal meningitis on board ship, but one of the former diseases was just beginning on the *Louisiana* at the end of the year. The senior medical officer's report follows:

The disease was introduced on board either by some ambulatory case which did not come to the notice of the medical officer or by one of the many cases of tonsillitis under treatment at that time, which was diphtheritic. The latter supposition is probably the correct one. There is also the possibility of its introduction by navy-yard workmen, as the ship was overrun with them, and it is known that diphtheria was prevalent in Portsmouth and Norfolk.

During the latter part of December several cases of tonsillitis were under treatment. They were clinically cases of follicular tonsillitis, and it was not until December 31 that any were at all suspicious of diphtheria. These two were immediately isolated and the following day were transferred to the naval hospital; they both proved to be diphtheria. On December 27 a case of fissure in ano was sent to the hospital, and on the evening of the day following his admission he developed a patch on tonsil, which

was cultured and incubated, and on the 31st showed diphtheria. He was admitted to the sick list of the ship on December 20, hence his infection occurred on board, and proves that some unknown focus had existed on board.

A total of 74 cases were transferred to the hospital as with tonsillitis and diphtheria. Of this number 50 were positive. The majority of the cases transferred presented clinically more the appearance of tonsillitis. Twenty-four of the 74 were tonsillitis, so we had to contend with a mixture of tonsillitis and diphtheria, and it was not easy to differentiate the two clinically. The greater number of diphtheria infections were from a mild strain; 34 showed positive clinical signs, 18 of which were marked. The disease did not confine itself to any particular part of the ship or any one mess. It was very general in its manifestations; 1 case developed in the junior officers' mess. It was more a personal infection than a ship infection.

On January 4 energetic measures were adopted. The crew was mustered daily at 9 a. m., and throat inspections made; any cases presenting the clinical signs of diphtheria were immediately sent to hospital. All whose throats showed an inflammatory condition or were at all suspicious were immediately isolated and cultures made and examined in twelve hours. Previous to the installation of an incubator on board this work was done at the hospital laboratory. The isolation ward and sick bay were used for isolating these cases, and when the number outgrew these accommodations one of the 8-inch passageways was used for the purpose. A sentry was placed at the scuttle-butt with instructions to see that the drinking cups were kept in the formaldehyde solution. All spit kits were thoroughly cleansed thrice daily and rinsed with mercuric chloride solution 1-1,000, and a small amount of this solution allowed to remain therein. Particular attention was paid to mess gear, especially knives, forks, and spoons, which, after using, were placed in scalding hot water and thoroughly cleansed. A large quantity of Dobell's solution was continually at hand, and the men instructed to use this frequently during the day as a gargle.

On January 7 the commandant placed the ship in strict quarantine. There were absolutely no personal communication with the outside. This, of course, necessitated the discontinuance of all work on the ship. A large box was constructed and in this all outgoing mail was disinfected with formalin. A part of the dock abreast the ship was roped off, thus giving a spacious area for recreation and exercise. Baseball, football, basketball, and boat-races were encouraged, thus keeping the men in the open and giving them an abundance of fresh air. A systematic disinfection of the ship, as far as could be done with men on board, was begun. Compartments which could be closed and permitted the use of formaldehyde gas were disinfected in this way. With the men living on the ship this could be done only over a very small part of the ship. We had to be content with the repeated scrubbing of all paintwork with mercuric chloride (1-2,000) solution. Bedding was placed in the 8-inch passageways and the two 12-inch handling rooms, these places sealed and exposed to the formaldehyde gas for twelve hours. Clean hammocks were afterwards served out and the soiled ones scrubbed. Bedding was aired as part of the daily routine. All clothing was disinfected with formaldehyde gas. The compartments above designated for the disinfection of bedding were used for this purpose. A division with its bags was marched below, the bags emptied, the clothing sealed and allowed to remain closed for twelve hours. On opening up the men were again mustered and marched below. They then removed all the clothing which they wore; this was triced up, and they dressed themselves in clean sterilized clothing. In this way every bit of clothing of the entire ship's personnel was gone over. The showers in the crew's washroom were connected with a steam lead and thus the men had ample opportunity for bathing, which I am glad to say they availed themselves of frequently.

Formaldehyde gas was generated by potassium permanganate and formalin solution 40 per cent, 100 grams of the former and 500 c. c. of the latter to each 1,000 cubic feet of space.

The infection, as before stated, was not so much one of the ship as a personal one, and our salvation was having a hospital under our lee to which immediate transfer of suspicious cases could be made. In coping with such a disease as diphtheria on shore the three-camp system can be inaugurated, but obviously this is wholly impossible on a ship with a complement of 900. The only hope is the immediate eradication of any focus. The last cases appeared on January 13, and after eight days without the development of any we were released from quarantine.

There was hearty cooperation on the part of officers and men. Sick call was held three times a day, and the men voluntarily came to the medical officer if there was the slightest suggestion of sore throat. Inspection was continued for ten days after the appearance of the last case, and any case of inflamed throat was immediately cultured and incubated. The throat inspection showed a large number of throats chronically inflamed and many cases of enlarged tonsils which will require excision.

Immunization.—Each member of the entire ship's personnel was given an immunizing dose of 500 units of antitoxin. It was supplied in tubes containing 2,000 units. The method was as follows: The belly was chosen as the point of injection, the area thoroughly cleansed with soap and water, the soap removed with sterile water and a thin coating of iodine painted over part through which the needle was introduced, the point of puncture then sealed with gauze and collodion. The serum being supplied in tubes of 2,000 units necessitated using the same needle four times. It was cleansed by placing in hot sterile water and wiped with sterile gauze. Particular care was paid to specific cases. The question was always asked of a subject whether he had any specific history. In those from whom such history was obtainable, or whom we knew had syphilis—the needle was thrown away after use. The total number immunized was 950 and in not a single instance was there any infection. One man refused inoculation and was tried by general court-martial.

The effect of the antitoxin was varied and some interesting cases of serum sickness developed. Four per cent (34) developed a local urticaria at point of inoculation. This appeared five to seven days after the injection. One case showed severe urticaria, general over body, twenty minutes after the inoculation. This man has a history of frequent and severe attacks of hives. Two cases, both officers, within twenty-four hours showed general urticaria, joint pains, headache, and some febrile disturbance. These symptoms disappeared within twenty-four hours.

Six well-marked cases of serum sickness, having an incubation period of from eight to thirteen days, were observed. An erythematous rash appeared on body, most abundant on chest and abdomen, and having the characteristics of a measles eruption. There was puffiness about the face and extremities, stiffness, and some discomfort in joints. Headache, slight febrile disturbance 100° to 101° F., and lymphatic enlargement were the prominent symptoms. Prostration in 2 cases was marked. The urine was negative for albumen, and a leucocytic count showed a slight leukopenia, 5,000. As such a number of men received injections, and four different preparations of antitoxin were used, these cases were probably due to a personal idiosyncrasy and not to faulty serum.

Two interesting cases of Vincent's angina were discovered. A small patch of exudate was found on tonsil, which, when removed, left a deep ragged ulcer with undermined indurated edges giving a "gritty" feel to the needle. Repeated cultures of this on blood serum for twelve hours were negative for the Klebs-Löffler bacillus. A stained specimen of a smear of exudate showed staphylococci and numerous Vincent's bacilli, which with methylene blue showed the peculiar spindle shape and banded appearance. They were accompanied by numerous tiny spirochæte. Beyond a little local soreness and irritation there were no subjective symptoms. Their course was very protracted and eventually showed improvement under application of pure carbolic acid. Inoculations on glycerin agar, agar and bouillon and blood serum failed to grow this organism.

The admission rate for pulmonary tuberculosis continues to fall, and the rate for all forms declined from 6.26 for 1908 to 5.60 per thousand last year. Except among the few who develop tuberculosis after many years of service, this disease is particularly associated with the first half of the first enlistment or of service at the Naval Academy; Table 19 indicates that, aside from among recruits; consumption is abnormally prevalent among the engine-room force, electricians, prisoners, and particularly the hospital corps in which the admission rate is more than three times as high as for the service at large and this does not include the "academic" cases admitted for record at Las Animas, which would have made the hospital corps incidence 29 instead of 17.24 per thousand. As will be also noted under typhoid fever, hospital attendants seem to be far more susceptible to the acquirement of "contact" infections than of the longer recognized contagious diseases for which the corps shows a lower admission rate than does the general service. Although our own service has taken advantage of most of the recent methods to arrive at the earliest possible diagnosis of tubercular disease the one aid which medical officers of the German navy have found of greatest value has been seldom availed of—this is the detection of enlarged bronchial lymph nodes in suspicious catarrhal cases by X-ray exam-

ination. It is misleading to compute damage sustained by tubercular disease from days of treatment at the naval sanatorium at Las Animas, Colo., for the reason that the amount of treatment there is cumulative from year to year, many remaining throughout their enlistment and still others electing to continue for an indefinite period thereafter, and now that it is the bureau's determined policy that patients who have suffered from unquestioned phthisis shall not be returned to general duty in the service, it is proposed hereafter to regard transfers to that institution as statistically equivalent to discharge from the service as should also be transfers to hospitals for the insane; for practical purposes neither any longer represents the active force of the navy.

The value of tuberculin tests in demonstrating those among the personnel who have a presumably latent tubercular process is attested by the following quotation from the annual report from the *Relief*:

Two hundred and fifty-eight tuberculin tests have been recorded, of which 16 were by the Calmette method and 197 by the von Pirquet. Of the former, which was used in suspicious cases, 9 were negative; of the latter, 140 were negative, 12 doubtful or delayed. Of the 62 cases taken at random among the native crew, mess men, hospital corps, and officers, the von Pirquet test gave 49 negative and 8 doubtful and 5 positive.

While the number of tests is not sufficient to be of much value from a statistical point of view, yet the experience from its use during the last two years aboard this ship, comparing the clinical findings and past history of those tested has convinced the medical staff of the value of the test, especially when negative results are obtained. Patients giving the signs of acute tubercular infection, except presence of tubercle bacillus in the sputum, but giving no reaction later, entirely recovered and returned to duty, and, on the other hand, those not frankly tubercular but giving a reaction have later shown the presence of the tubercle bacillus.

It seems well worthy of trial, especially at large training stations, to test all recruits, especially those who appear below par, as it were on the borderland, before transferring them to cruising ships or distant service where, under less favorable environment, a small active or a latent infection may become rapidly progressive.

While it is recognized that this test, especially the von Pirquet, may react in healed cases, yet this shows that the individual has a susceptibility and, by his early elimination from the service, will give that much less vulnerable material.

Table showing the mean strength of the Navy and Marine Corps according to returns from medical officers, admissions to the sick list, and deaths from tuberculosis from 1898 to 1909, inclusive, also the ratio per thousand of admissions and deaths. Readmissions have not been included.

Year.	Strength of the navy.	Admissions with tuberculosis.	Deaths from tuberculosis.	Admissions per thousand.	Deaths per thousand.
1898.....	23,038	103	15	4.47	0.62
1899.....	20,113	93	9	4.40	.43
1900.....	22,977	131	14	5.70	.58
1901.....	26,101	146	12	5.59	.44
1902.....	30,249	145	16	4.79	.51
1903.....	36,535	250	10	6.84	.26
1904.....	39,450	268	23	6.79	.56
1905.....	39,620	243	18	6.13	.43
1906.....	41,690	206	19	4.94	.44
1907.....	44,083	226	12	5.12	.25
1908.....	50,984	319	30	6.25	.56
1909.....	55,550	311	40	5.59	.69

There occurred 548 cases of articular and muscular rheumatism on board cruising ships, as compared with 634 for 1908; the total damage in terms of individuals disabled throughout the year from rheumatism was 75.2, while for the previous year it was 88.9. The admis-

sion rate for rheumatic affections in any group of the personnel is shown by Table 19 to be above the average for the whole navy in proportion to juniority of service, and most of the cases would thus seem to be not essentially incident to service conditions.

Heat exhaustion and thermic fever effected approximately the same relatively small intrinsic damage, as for 1908, there being returned for these two affections but 490 and 208 sick days, respectively, with 3 discharges from the service. As shown by Table 19, heat prostration is practically an occupational injury, chiefly affecting the fireroom force, although officers, apprentice seamen, the clerical force, and marines appear to approximate the average admission rate for heat affections for the whole service, which is otherwise entirely contributed by the engine and fire room force. Numerous interesting case reports, with such comment as experience seemed to justify, have been published throughout the year in the Naval Medical Bulletin. Excessively high temperatures from firerooms are less seldom reported than formerly, and as already stated many of the cases are attributable to the lack of inurement of youths never physically examined for the arduous labor of coal passers.

There were somewhat fewer injuries and one more death from accident recorded on cruising ships than for 1908. As usual, wounds of the classified varieties, sprains, contusions, fractures, and burns furnished the majority of admissions and sick days for injuries. Ruptured ear drums numbered 19, the same number as for 1907, and 11 more than for 1908. Injuries, while more uniformly distributed among occupational groups than might be expected, find their highest incidence among the deck and engineer's forces.

Nine deaths from drowning resulted from the loss of the tug *Nezinscot* and a whaleboat from the *Marietta*. The loss of the tug *Nina* in March of the present year occasioned 31 deaths from drowning. Two officers and 3 men lost their lives on the *Nanshan* from suffocation from fumes while attempting to secure stores in the paint locker on May 27, 1909. One mess attendant and 1 private marine died as the result of boxing or skylarking on the *Vermont*.

Although the following 8 deaths resulted from a gun explosion on the *Charleston* on March 27, 1910, it seems proper to note in this report that 5 were instantly killed (2 by body being severed at the waist, 1 by destruction of left chest, neck, and arm, 1 by loss of portion of skull, and 1 from penetrating wounds of chest and abdomen); 2 died within a few minutes as result of loss of arm and laceration of chest, and 1 died within eight hours from chest penetration and multiple perforation of the intestines.

D. *Affections depending upon exotic exposure.*—As already mentioned in discussing typhoid vaccination on page 43, the admission rate, 3.4 per thousand, for typhoid fever is abnormally high; the case mortality for 1909 was 8.36 per cent and the total damage sustained 36.4 individuals' service lost throughout the year; the high rate of 6.7 for the Hospital Corps shows that contact is one of the greatest factors in the spread of infection, and the rate of 4.27 among officers probably indicates the danger from less restriction of articles of food and drink (uncooked salad vegetables, oysters, milk, and cream), although flies and roaches, well known to be more abundant about officers' pantries, may be an important transmitting factor; the high rate for musicians is doubtless accidental.

In order to place on record the opinions of medical officers as to typhoid, the following extracts from sanitary reports are quoted:

Atlantic Fleet.—During the year the personnel has enjoyed good health while cruising, but the same can not be said for the time the ships remained at their home ports at navy-yards; since without exception they contracted infectious and contagious diseases, particularly noticeable in such diseases as venereal, tonsillitis, measles, scarlet fever, and mumps. The latter three named diseases were prevented from becoming epidemic by early isolation and immediate transfer to the hospital.

The average age for the entire enlisted personnel of the *Connecticut* in December, 1909, was 23 5/12 years.

We may consider this as being about the average age for the fleet.

The average quarterly complement was.....	13, 229
The minimum complement was, first quarter.....	10, 060
The maximum complement was, third quarter.....	17, 131
Total number of admissions.....	9, 202
Total number of sick days.....	55, 057
Average number of sick days for each one of the personnel.....	4
Invalided to the hospital.....	1, 263
Invalided from service.....	28
Invalided on leave.....	1
Discharged to duty.....	8, 438
Died.....	20
Total number admitted, general infectious diseases.....	939
Total number admitted, tonsillitis.....	1, 531
Total number admitted, venereal diseases.....	2, 914
Total number admitted, injuries.....	1, 229
One case of general infectious disease for every 14 men.	
One case of tonsillitis for every 8 men.	
One case of venereal disease for every 4 men.	
One case of injuries for every 10 men.	

During the spring months and July 40 cases of typhoid fever occurred in the fleet. It is believed for the following reasons that nearly every case was contracted in Norfolk, Va., or the surrounding country, with possibly a few contracted in Philadelphia, Pa.

(a) The ships remaining the longest time at Hampton Roads had the most cases.

(b) The ships not visiting Norfolk or Philadelphia were free from the disease.

(c) According to the department of health, city of Norfolk, Va., typhoid fever existed in epidemic form during July, 1909, since every ward had the following number of cases noted below, or a total of 103:

	Cases.
First ward.....	15
Second ward.....	17
Third ward.....	12
Fourth ward.....	32
Fifth ward.....	14
Sixth ward.....	9
Seventh ward.....	1
Eighth ward.....	3

Take two cities such as New York, N. Y., and Philadelphia, Pa., and had they a proportional number of typhoids according to population, they would show for the former 4,841 and the latter 1,751 cases.

It was recommended that no liberty be given while the ships were at Hampton Roads, Virginia, during August and September, though during the latter month limited liberty was given. The personnel was instructed as to the prevalence of this disease at Norfolk, and recommendations were published for the protection of the crew and the liberty men against this disease.

Wisconsin.—Following the stay of the ships in Hampton Roads one case of typhoid fever developed. The patient had been to Norfolk only, where his family resided; had partaken of ice cream, milk, and oysters. The ship remained at the navy-yard, Portsmouth, N. H., from March 8 to June 24, 1909. At Hampton Roads, Virginia, from June 26 to June 29 liberty was given to a few of the first-class and special first-class men. Following this liberty and given an average incubation period of twelve days there developed six cases of typhoid. These men all went on liberty together, all went to the same places for food, and all ate ice cream and oysters in Norfolk. Following this outbreak the senior medical officer of this ship wrote officially to the

commanding officer and requested that no liberty be granted in Hampton Roads; this communication was forwarded to the commander in chief and no liberty was given until just before the fleet sailed for New York.

Louisiana.—On the return of the ship from the world cruise in February she was ordered to the navy-yard at Norfolk, Va., for docking and extensive repairs, where she remained until June 29. During this period six cases of febris typhoides developed. Two of these were commissioned officers. The department ordered a board of investigation of cases of typhoid fever on board the U. S. S. *Louisiana*. After a thorough and complete examination the board arrived at the conclusion that the infection was outside of the ship. Typhoid fever is endemic in Norfolk, Berkely, and Portsmouth and surrounding country, and it is utterly impossible to control the men's diet away from the ship; one can only caution and advise. The most rigid supervision was paid to stores brought on board, and fresh milk, oysters, etc., were absolutely prohibited. The post exchange at the marine barracks sells milk which is very good and is used generally by those in the yard and messes on board the ships, but unfortunately the amount for sale is not sufficient to supply the demand. They have their own herd of cows, and the strictest sanitary precautions and supervision are made. Milk from the dairies in town has been prohibited. It is particularly unfortunate that the condition existing in Norfolk and the immediate vicinity demands these measures, as a ship having such a home port necessarily has to be deprived of many simple foods while in the port.

Virginia.—Seven cases were transferred to the hospital as with the diagnosis of typhoid fever; one proved to be an error in diagnosis. The others were positive, and were, in my opinion, contracted while on liberty at and in the vicinity of Norfolk, Va. After we had been away from Hampton Roads over the incubation period no further cases developed, which proves, to my mind, that the cases were contracted ashore. It is believed that many of the cases of enteric fever in and about Norfolk have been due to infected milk.

Maine.—Three cases of typhoid fever gave a clear history of infection at Norfolk, Va. Liberty was given at Hampton Roads, and these men went to Norfolk on June 27. Two of them went together and drank of the same water and milk. They were admitted to the sick list in the following sequence—July 9, 11, and 13. There was an absence of prodromal symptoms in each case. The temperatures on admission were 103.8°, 103°, and 102.2°. In each case there was a slight tonsillitis, or inflammation of the air passages, from exposure to Cape Cod weather, which is thought to have masked the febrile course of typhoid. These cases with 11 others of the fleet were transferred by the *Maine* to the naval hospital at Chelsea, Mass.

Missouri.—It has been my experience that in nearly all of these epidemic diseases the great source of danger is the mild case, so liable to be overlooked. For this reason all cases as well as all suspects can not be transferred from the ship too quickly to avoid establishing a focus of infection on board. As long as this is done no great danger can come from the occasional imported case.

The usual head trough is considered dangerous in typhoid infections on account of the exposure to flies and the difficulty of keeping it free from fecal matter and clean. This has received special attention, a hospital apprentice being detailed to supervise the cleaning and disinfection as long as there is any danger of infection.

Mississippi.—The three cases of typhoid fever occurred in men who visited Norfolk while on liberty from the ship at Hampton Roads, Virginia, in June.

Wolverine.—The health of the crew as a whole has been excellent. As will be seen from a review of the sick days, more than 25 per cent of them were caused by typhoid fever. In a ship whose complement is less than 100, six cases of typhoid fever appearing within a year might cause alarm, suggesting a common source of infection or a carrier distributing the disease. It should be noted, however, that five of these cases were admitted to the sick list during the summer cruise of the ship around the lakes. This vessel, visiting 20 or 30 different ports during the course of a summer, is very prone to come in contact with conditions which favor the propagation of typhoid fever.

The majority of harbors on the Great Lakes consist chiefly of a breakwater inclosing a body of more or less stagnant water, into which the sewers of the city empty.

The *Wolverine*, lying in such a harbor, at anchor or more often tied up to a dock, and in the latter case frequently alongside of a sewer, is accustomed to use the water for all washing purposes. Men have even been seen to clean their teeth with this water. In one or two places conditions were so bad that water was issued in limited amounts for washing, and the shower baths had to be cut off entirely.

Many medical men in this vicinity have told me that several towns and cities along the lakes suffer from epidemics, and the infection gradually spreads owing to

the heavy excursion traffic. The officers of this ship believe that the harbor conditions in Toledo and Buffalo were responsible for the cases of typhoid which appeared on board.

I am of the opinion that all probable sources of danger from typhoid fever can be eliminated, and that in the future while cruising no water from harbors should be used for washing purposes and that wherever practicable the ship should be moored alongside a dock where connection with the city's water supply can be made.

Navy-yard, Norfolk.—One case of typhoid fever from among the marines was sent to the naval hospital, Norfolk, on December 18 and terminated fatally eight days later. This case was undoubtedly contracted outside the reservation.

Naval hospital, Philadelphia.—Published reports from the department of health of the city of Philadelphia show the prevalence of typhoid fever, notwithstanding the completion of the city filtering plant. The city water is again filtered in the different houses in the Naval Home inclosure before being used. To be at all effective the filters should be taken apart, thoroughly cleaned, and the charcoal renewed at least once a year. I am informed that it has been nearly three years since the filters in the inclosure have been cleaned and renewed, and I recommend that they again be cleaned and connected by larger intake pipes with the mains.

While filtered water is far safer than the unfiltered, it requires boiling to be made thoroughly safe for drinking and bathing. This is oftentimes difficult to have properly done, especially when a number of people is considered; and it is recommended that a distilling plant be established for all buildings in the inclosure of the Home. It is believed that the addition to the power plant now being installed will be of sufficient steam-generating capacity to give an adequate distilled-water supply. [Filters have been cleaned and the distilling plant authorized.]

The yearly fluctuation in local diseases reported and perhaps largely due to the personal equation of medical officers among a comparatively small population is no better demonstrated than in the case of dengue for which the admission rates during the last three years have been 12.2, 7.5, and 8.8 per thousand, respectively; this rate is found to vary much more widely when applied to the average complements of the few stations showing endemicity for this disease and, while allowance must be made for climatic variations and other factors influencing mosquito prevalence, error of diagnosis is apparent, though unavoidable under service regulations, for many of the cases were subsequently shown to be malaria, simple continued fever or thermic fever; it seems that only such cases as show the characteristic recrudescence of fever and eruption should be returned as dengue.

The admission rate for malarial affections declined from 29.8 for 1908 to 18.85 for 1909. The most notable work in mosquito prophylaxis is shown with the marine detachment on the Isthmian Canal Zone and at Olongapo, P. I., where the medical officer in command of the hospital ship *Relief* demonstrated that the infection was acquired in the vast majority of instances at the rifle range or on the "hikes," rather than on the station proper; no cases developed on the *Relief*, while approximately 50 per cent of those going to the target range contracted malaria. The incidence of malaria is more than five times as high among marines as among the next highest occupational group, which is the Hospital Corps (serving with them), and all other groups of the personnel fall well below the mean malarial rate for the service. Of 630 marines from whom reports could be obtained six weeks after leaving the Isthmus of Panama on the *Prairie* in the spring of 1910, but 17 were found to be infected with malaria, 12 having had previous attacks; the stations whence these 17 cases were reported are Portsmouth 3, New York 1, Norfolk 2, Port Royal 3, Charleston 7, and the *Prairie* 1; quinine prophylaxis was not continued on the *Prairie*.

Dysentery occasioned its customary little damage, 127 admissions (some of which should doubtless have been readmissions), 4,052 sick days, 1 death, and 5 discharges from the service.

Of skin diseases, scabies has already been considered under "A." Aside from the relatively few functional disorders of the skin or those depending upon specific infection, disability was furnished by the destructive inflammation largely due to pyogenic organisms; abscess, boil, carbuncle, cellulitis, and ulcer caused 1,869 admissions (1,387 on cruising ships), 9 discharges, 1 death, and 22,844 sick days.

The admission rate on cruising ships for the six contagious diseases (diphtheria, cerebro-spinal meningitis, measles, mumps, scarlet fever, and smallpox) was reduced one-half, or 10.54 per thousand, lower than for 1908, when it reached 21.41, and the resulting sick days were reduced from 5,626 to 2,251, partly owing to cruising in proximity to hospitals; one-half the loss of service was due to mumps as compared with 60 per cent for the former year.

There were 13 cases of smallpox with 4 deaths in the entire service during 1909; 11 cases and 2 deaths were recorded for 1908; following exposure in Yokohama, Japan, during the first quarter of the present year 10 highly virulent cases of the disease developed on the *Washington* and 5 deaths resulted; measures for more thorough vaccination have already been considered on page 43.

In a preceding section (page 44) the prophylaxis of venereal diseases was discussed and a profusion of favorable reports from ships and stations might be quoted to show the enthusiasm with which medical officers have taken up the problem wherever they could be assured of effective disciplinary support from commanding officers; the Naval Medical Bulletin will continue to publish reports selected to disseminate such ideas on the subject as should prove of value to the service at large. The general admission rate for all venereal affections for 1909 was 199.17 as compared with 127.76 for 1908, while that for primary infections was 160.40 for 1909, about 50 per cent higher than that for any previous year. As already shown, the increase is apparent rather than real on account of the more conscientious admission of all cases for record. The comparatively small increase of admissions for syphilis primitiva and consecutiva combined signify that chancroid and gonorrhoea, formerly considered of less consequence, were very commonly not reported; it is probable that the combined rate for syphilis (26.57) is much higher than the actual incidence because each year more primary cases are followed up and later admitted as *s. consecutiva*, while it is well known that one case may be admitted several times within a year owing to frequent transfer from one ship or station to another. It seems desirable to place on record the following table to show the admissions since 1880, for the three infections, syphilis, gonorrhoea, and chancroid, together with the aggregate admission rate and the more reliable admission rate for syphilis primitiva and consecutiva combined:

Table of admissions and rates for venereal infections since 1880.

Year.	Syphilis.	Admissions for—		Aggregate admissions.	Aggregate admission rate per thousand.	Admission rate for syphilis, primitive and consecutive.
		Gonorrhoea.	Chancroid.			
1880.....	451	212	72	735	81.64	50.094
1881.....	403	213	108	724	75.85	42.216
1882.....	490	216	113	819	87.40	52.289
1883.....	340	252	93	685	74.48	36.969
1884.....	330	298	171	799	80.23	33.136
1885.....	279	370	181	830	90.31	30.356
1886.....	278	389	201	869	94.58	30.259
1887.....	244	396	167	807	83.90	25.369
1888.....	296	348	228	872	87.59	29.633
1889.....	310	316	118	744	66.32	27.632
1890.....	256	286	152	694	58.97	21.754
1891.....	198	284	100	582	50.00	17.216
1892.....	174	329	111	614	52.14	14.777
1893.....	171	304	60	535	44.18	14.122
1894.....	272	501	208	981	78.36	21.725
1895.....	239	330	152	721	58.48	18.862
1896.....	239	303	131	673	47.43	17.359
1897.....	270	323	136	729	47.87	17.729
1898.....	383	503	190	1,076	46.71	16.668
1899.....	406	517	226	1,149	57.13	20.186
1900.....	465	525	214	1,204	52.40	20.233
1901.....	546	617	217	1,380	52.87	20.919
1902.....	606	771	284	1,661	54.91	20.034
1903.....	816	1,032	306	2,244	61.42	22.307
1904.....	880	1,512	542	2,934	74.04	22.307
1905.....	981	2,085	538	3,604	91.38	24.759
1906.....	1,147	2,640	733	4,520	108.42	27.513
1907.....	881	2,274	554	3,709	84.14	19.985
1908.....	1,001	3,015	665	4,681	91.81	19.634
1909.....	1,476	5,861	1,573	8,910	160.40	26.572

With increasing liberality in the issue of fresh water, itch on board ship is rapidly decreasing. For the years 1905 to 1909, inclusive, the admissions afloat were 370, 385, 226, 171, and 140, in spite of a steadily increasing force which would, of course, show even a far more favorable decline in the rate; it is interesting to note that canvas baths have been introduced on ships of the German navy, in which the men receive a final rinse with fresh-water.

The admission rate for alcoholism has been lower for the last three years than for many years; there were, during 1909, 350 admissions (rate 6.3 per thousand), 1,786 sick days, and 9 deaths. Attention is again invited to the experience of the German navy in its decline in alcoholism, believed to be due to the installation of carbonating apparatus on board the larger ships. Table 19 shows that among enlisted men the alcoholism rate per thousand is highest among the engine-room force (13.41), fireroom force (9.53), artificers (12.78), yeomen (12.04), marines (11.52), and lowest among the hospital corps (1.91), and apprentice seamen (0.90). With the first four groups more money and more space convenient for secreting liquor are probable factors, while with marines the nature of their duties doubtless favors opportunity.

The decline in admissions for neuritis and chronic gastric catarrh noted in last year's report as parallel with that for alcoholism has continued. The rate for neuritis was 1 for 1908, and 0.57 for 1909; for chronic catarrh of the stomach it was 1.25, and 0.95, for the respective years.

E. *Affections depending upon special conditions of service.*—Beginning next year the statistical returns will have the nomenclature for

mental diseases revised to conform to the more modern classification which has been accepted since 1905. The admission rate for the combined terms which the navy has used—dementia, mania, melancholia, and paranoia is lower than ever. The rate for 1905 was 2.99; 1906, 3.17; 1907, 3.38; 1908, 3.02, and for 1909, 2.61.

The loss which the Government sustains from the payment of "sane men's salaries to insane men" or their families, together with the evidence which recent laboratory investigation has adduced to show that the vast majority have become demented or paralyzed from disease not incident to service has occasioned appreciation that many of the insane on the active list of the navy might be invalidated from the service without injustice to the individual. Accordingly after judicious consideration of the origin, duration, and nature of the psychosis, as well as length of service already rendered, upon recommendation of the naval medical officer on duty at the Government Hospital for the Insane 47 of the 63 men still carried on the pay rolls were surveyed during the present summer with view to discharge. Heretofore while enlisted men of the Army and Marine Corps were dropped from the rolls either upon commitment or within the following year, those of the navy have been continued up to the expiration of enlistment or discharge from the institution, until which time their places in the service could not be filled by new recruits. Both the admission and damage rates for neurasthenia maintain the average figures for the past fifteen years. The constant loss of service of 31 persons is nearly as great as that for typhoid fever, against which our activities are ever directed. Evidently the true etiology and prodromes of this obscure affection deserve more careful study at a time when preventive medicine is accomplishing so much in other directions. It would be idle to estimate what percentage of the 144 cases returned as neurasthenia for 1909 were really psychasthenia, but for future determination the two will be differentiated in the nomenclature. There are grounds for believing that neurasthenia has been a more convenient term for invalidating than for curing those who are unhappy in their environment from indefinite but none the less real mental or physical deterioration. The diagnosis appears to be made about four times as often among midshipmen and officers as among other groups, except the hospital corps and musicians, who show nearly twice the mean admission rate.

The admission rate for appendicitis and peritonitis continues to rise; in 1895 it was less than 1 per thousand; in 1905, after a better recognition and understanding of the condition, it had reached 4.9; in 1908 it was 6.24; and for last year it reached 6.86; the death rate (0.140) and invaliding rate (0.192) vary but little and do not show the corresponding increase from year to year; the apparent artificiality of the steady rise in diagnosis of appendicitis may be attributed perhaps to the growing tendency to send to hospital or operation early doubtful cases of colic rather than to take the alternative chances of unwarranted delay; the very high rate of 26.82 among members of the Hospital Corps would support this opinion; at the same time, with better surgical training and facilities, the death and invaliding rates would not be expected to rise in proportion to the admission rate.

Acute and chronic nephritis showed a slightly higher rate (1.58) than for 1908, when it was 1.43, while 15 deaths resulted each year. The incidence of rheumatism, heart disease, and pulmonary tuberculosis among men of long service is obscured by the relatively high rates found among midshipmen and recruits and by the gradually diminishing proportion of long-service men among the personnel.

The accompanying charts declare the prevalence of infectious diseases at the more important shore stations and in a large degree serve as a basis for comparison of relative local health conditions with those published on page 77 of last year's report.

CHART SHOWING COMPARATIVE AND MEAN INCIDENCE OF TYPHOID FEVER—& TUBERCULOSIS—AT THE MORE IMPORTANT STATIONS 1907 ADMISSION RATE ON CRUISING SHIPS NOT INCLUDED

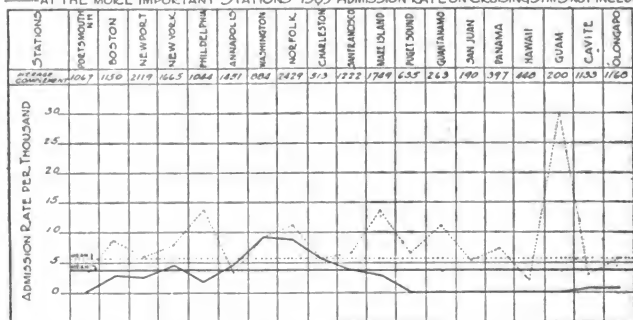
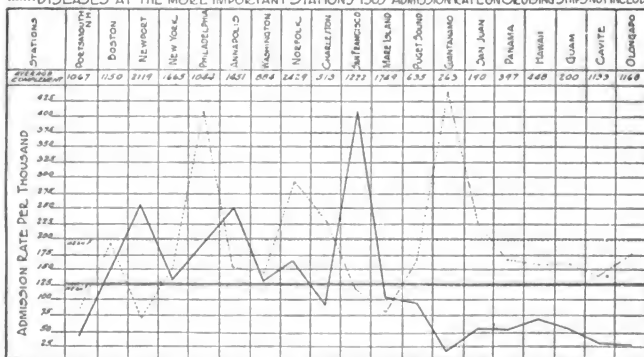


CHART SHOWING COMPARATIVE AND MEAN INCIDENCE OF CONTAGIOUS—& VENEREAL DISEASES AT THE MORE IMPORTANT STATIONS 1907 ADMISSION RATE ON CRUISING SHIPS NOT INCLUDED



(CONTAGIOUS DISEASES: Cerebro-spinal meningitis, diphtheria, influenza, itch, measles, mumps, pneumonia, scarlet fever, and tonsillitis.)

NEW CONSTRUCTION COMPLETED, UNDERTAKEN, AND CONTEMPLATED.

For the information and study of all interested, the following tabular statement is submitted to show the cost of recent and contemplated hospital construction:

Construction undertaken or completed.

U. S. Naval Hospital.	Year.	Appropriation or fund.	Amount.
PORTSMOUTH, N. H.			
Laundry equipment.....	1907.....	Naval hospital fund.....	\$2,675.00
Boiler.....	1908.....	do.....	1,847.00
Repairs, hospital building.....	1908.....	Repairs.....	1,065.00
Surveys for new buildings.....	1909-10.....	Naval hospital fund.....	800.00
Water main.....	1910.....	do.....	3,000.00
New hospital buildings.....	.....	do.....	282,390.00
Loomis filter.....	.....	do.....	2,000.00
CHELSEA, MASS.			
Erection officers' quarters.....	1908.....	Mar. 3, 1905.....	19,137.35
Repairs, boilers, etc.....	1909.....	Repairs.....	581.82
Repairs, medical director's residence.....	1909.....	do.....	500.00
Washing walls.....	1910.....	do.....	375.00
New hospital buildings.....	.....	Naval hospital fund.....	282,966.00
Loomis filter.....	.....	do.....	2,000.00
NEWPORT, R. I.			
Addition to hospital.....	.....	June 7, 1900.....	20,000.00
Filling pond.....	.....	Mar. 3, 1901.....	20,000.00
Painting hospital building.....	1908.....	Repairs.....	430.00
Shed for sterilizer.....	1908.....	do.....	248.50
Repairs to nurses' and stewards' wards.....	1909.....	do.....	230.00
Smokestack for boilers.....	1910.....	do.....	170.00
Erecting sentry box.....	1910.....	Naval hospital fund.....	185.00
Purchase of hospital site.....	1910.....	do.....	48,550.00
New hospital buildings.....	.....	do.....	282,396.00
Loomis filter.....	.....	do.....	2,000.00
NEW YORK, N. Y.			
Officers' quarters.....	1904.....	Mar. 3, 1903.....	19,914.30
Drainage system.....	1904.....	Repairs.....	1,999.24
Extending boiler house.....	1904.....	do.....	2,139.00
Rebuilding hospital wall.....	1904.....	do.....	1,339.04
Pavements and walks.....	1905.....	do.....	8,156.05
Repairs to flooring.....	1905.....	do.....	492.00
Repairs to driveways.....	1905.....	do.....	325.00
Tin roof, old laboratory building.....	1907.....	do.....	850.00
Repairs to kitchen.....	1907.....	Repairs.....	463.00
Repairs to enlisted men's and warrant officers' quarters.....	1908.....	do.....	410.00
Repairs, annex building.....	1908.....	do.....	225.00
Concrete floor, laundry.....	1908.....	do.....	290.00
Repairs to hospital wall.....	1908.....	do.....	4,532.75
Repairs to medical director's residence.....	1908.....	do.....	4,529.00
Converting old laboratory building into wards and old liquor store-house into disinfecting building.....	1908.....	July 1, 1902.....	6,000.00
.....	.....	Repairs.....	13,509.56
.....	.....	Naval hospital fund.....	8,462.92
Building for contagious diseases to quarters' nurses.....	1909.....	do.....	5,558.00
Construction of roadway.....	1909.....	Repairs.....	3,109.77
Tiling in operating room.....	1909.....	do.....	401.00
Repairs to chimney.....	1909.....	do.....	390.00
Repairs to chapel rooms.....	1909.....	do.....	148.00
Repairs to drains, west wall.....	1909.....	do.....	284.00
Wiring in stable.....	1910.....	do.....	104.00
Repairs to operating room.....	1910.....	do.....	150.00
Repairs, etc., to main building.....	1910.....	do.....	1,530.00
Alterations, toilet and dressing room.....	1910.....	Naval hospital fund.....	6,190.70
Repairs, lighting circuits.....	1910.....	Repairs.....	487.00
Addition to nurses' quarters.....	.....	Naval hospital fund.....	9,240.00
Remodeling of rooms.....	.....	do.....	10,000.00
Building for contagious diseases.....	.....	do.....	60,000.00
PHILADELPHIA, PA.			
Repairing hospital building.....	1904.....	Repairs.....	6,748.00
Steam heating apparatus.....	1904.....	do.....	594.00
Do.....	1905.....	do.....	1,565.48
Plumbing repairs.....	1905.....	do.....	1,773.00
Repairs to steam-heat and power plant.....	1906.....	do.....	783.50

Construction undertaken or completed—Continued.

U. S. Naval Hospital.	Year.	Appropriation or fund.	Amount.
PHILADELPHIA, PA.—continued.			
Plumbing repairs.....	1906.....	Repairs.....	\$641.58
Repairs to steam-heat and power plant.....	1908.....	do.....	699.00
Repairing roofs hospital building.....	1908.....	do.....	259.85
Addition to boiler house.....	1910.....	Naval hospital fund.....	2,677.00
Alterations in power plant.....	1910.....	do.....	15,747.80
Alterations in hospital.....	1910.....	do.....	157,868.16
Kitchen, pantry, and diet equipment.....	1910.....	do.....	5,375.00
WASHINGTON, D. C. (Ninth and Pennsylvania avenue.)			
Repairs and alterations to accommodate Hospital Corps Training School.....	1908.....	Naval hospital fund.....	3,403.00
NAVAL MEDICAL SCHOOL HOSPITAL, WASHINGTON, D. C. (new).			
Erection hospital building.....	1906.....	Mar. 3, 1903-1905.....	144,495.14
Approach to grounds.....	1906.....	Repairs.....	18,002.12
Painting interior walls and ceilings.....	1907.....	Naval hospital fund.....	1,500.00
Changing location hot-water pipes.....	1907.....	Repairs.....	223.00
Changing approach.....	1907.....	do.....	509.30
Cement sidewalks E street.....	1907.....	do.....	478.70
Disinfecting apparatus.....	1908.....	Naval hospital fund.....	634.00
Erecting 2 additional wards.....	1908.....	Mar. 2, 1907.....	59,333.89
Stable, laundry, and conservatory buildings.....	1908.....	Naval hospital fund.....	30,551.40
Heating plant for new wards.....	1908.....	do.....	7,379.10
Laundry equipment.....	1908.....	do.....	2,850.00
Repairs to conduits.....	1909.....	do.....	117.35
Hydrotherapy-room equipment.....	1909.....	do.....	3,026.00
Macadam roads.....	1909.....	do.....	10,056.48
Heating new buildings.....	1910.....	do.....	263.53
Installing 2 elevators.....	1910.....	do.....	7,384.00
Generating set.....	1910.....	do.....	3,136.00
New buildings.....	1910.....	do.....	223,221.21
Extension power house, etc.....	1910.....	do.....	10,000.00
Addition to power plant and distributing system.....	1910.....	do.....	33,269.00
ANNAPOLIS, MD.			
Erection hospital building.....	1906.....		200,000.00
General equipment, hospital.....	1907.....	Naval hospital fund.....	7,606.43
Kitchen equipment.....	1907.....	do.....	2,243.50
Laundry equipment.....	1907.....	do.....	2,851.00
Repairs to wall, water front.....	1908.....	do.....	1,955.00
Altering storeroom to laboratory.....	1908.....	do.....	556.93
Building 2 isolation and 1 west ward.....	1910.....	May 3, 1908.....	81,000.00
Staff and nurses' quarters and stable.....	1910.....	Naval hospital fund.....	96,600.00
NORFOLK, VA.			
Officers' residence.....	1905.....		19,889.60
Renovating and altering hospital building.....	1905.....	June 29, 1915.....	199,621.43
Construction of camp.....	1908.....	Naval hospital fund.....	3,701.35
Covering concrete roof of power house.....	1908.....	do.....	625.00
Contagious-disease building.....	1908.....	Repairs.....	6,710.91
Addition to contagious-disease building.....	1908.....	Naval hospital fund.....	6,300.00
Chimney for power house.....	1908.....	do.....	3,620.00
Tank and tower.....	1908.....	do.....	11,500.00
Laundry equipment.....	1909.....	do.....	3,372.00
Heating and ventilating system.....	1909.....	do.....	33,600.00
Erection of power plant.....	1909.....	do.....	88,195.81
Kitchen equipment.....	1909.....	do.....	3,632.91
Fire protection.....	1909.....	do.....	1,400.00
Repairs to storehouse floor.....	1909.....	Repairs.....	1,340.00
Repairs to kitchen, boiler, fireproofing.....	1910.....	do.....	1,128.71
Marine guardhouse.....	1910.....	Naval hospital fund.....	1,432.97
Labor for electrical installation.....	1910.....	Repairs.....	3,014.00
2 additional wards.....	1910.....	Naval hospital fund.....	85,484.00
Remodelling building and installing hydrotherapeutic apparatus.....	1910.....	do.....	5,050.00
PORT ROYAL, S. C.			
Hospital steward's quarters.....	1910.....	Naval hospital fund.....	1,200.00
PENSACOLA, FLA.			
Water supply.....	1904.....	Repairs.....	830.00
Miscellaneous repairs.....	1905.....	do.....	1,830.00
Tank and tower.....	1907.....	do.....	1,000.00

Construction undertaken or completed—Continued.

U. S. Naval Hospital.	Year.	Appropriation or fund.	Amount.
SAN JUAN, P. R.			
Miscellaneous repairs since	1904	Repairs	\$10,000.00
Minor repairs only	1910	do.	400.00
GREAT LAKES, NORTH CHICAGO.			
Main hospital building		May 3, 1908	231,400.00
Laundry and disinfecting buildings		Naval hospital fund	17,000.00
House for medical officer in command		do.	24,000.00
Two houses for junior medical officers		do.	38,000.00
Heating and electrical distributing		do.	30,780.00
Water, sewer, and drainage system		do.	9,122.00
Extension to various distributing mains		do.	9,000.00
Contagious-disease building and nurses' home		do.	60,000.00
Roads and sidewalks		do.	26,000.00
Clearing, grading and filling		do.	10,000.00
LAS ANIMAS, COLO.			
Hospital buildings	1907	Repairs	27,617.15
Sewer system	1907	Naval hospital fund	3,780.00
Repairs and alterations, administration building	1907	do.	7,152.13
Additions to officers' quarters	1907	do.	4,272.00
Water tank and tower	1907	do.	8,472.00
Artesian well	1907	do.	1,150.58
Water tank, windmill, and tower	1907	do.	1,100.00
Stone addition to power-house building	1908	do.	395.00
Power, lighting, and heating plant	1908	do.	77,566.46
Lean-to, wards, subsistence building, etc.	1908	do.	49,000.00
Hospital Corps quarters	1908	do.	19,025.00
Bakery equipment	1908	do.	825.00
Disinfecting chamber, etc.	1908	do.	850.50
Bakery building and laundry	1908	do.	4,350.00
Water system	1908	do.	18,014.05
Irrigating ditch, right of way	1908	do.	1,176.00
Employees' quarters, bowling alley, etc.	1908	do.	15,925.00
Laundry equipment	1908	do.	2,975.00
Altering west storehouse	1908	do.	3,650.00
Irrigation reservoir	1908	do.	6,280.79
Servants' quarters	1908	do.	1,075.00
Remodelling east storehouse	1908	do.	7,800.00
North storehouse	1908	do.	6,890.46
Artesian well	1908	do.	1,274.35
Kitchen equipment	1908	do.	1,896.00
Electric light and distributing system	1908	do.	10,901.59
Plastering outside walls building	1908	do.	2,795.00
Fence and gate (north side)	1908	do.	694.00
Additional boiler	1909	do.	2,030.00
Painting single roofs	1909	do.	2,320.94
Building for sterilizing purposes	1909	do.	600.00
Kitchen equipment, west wards	1909	do.	1,600.00
Irrigation well	1909	do.	1,963.00
Repairs and additions—building	1909	do.	6,963.66
Quarters for petty officers	1909	do.	4,235.00
Converting west barracks to wards	1909	do.	44,243.05
Generating set	1909	do.	1,954.00
Quarters for civil employees	1909	do.	7,594.74
Pump and pipe line, etc.	1909	do.	4,834.00
Telephone system	1909	do.	3,000.00
Artesian well and pumping outfit	1909	do.	4,402.35
Cottages (5), infirmary, etc.	1909	do.	35,228.00
Extending sewer and water system	1909	do.	6,800.00
Garage	1909	do.	1,975.00
Addition to enlisted men's infirmary	1909	do.	38,075.00
Meat-cutting room	1909	do.	895.00
Addition to power house	1909	do.	738.50
Kitchen equipment	1910	do.	2,367.23
Erecting brig and mortuary	1910	do.	3,530.00
Electric mains, sick officers' quarters	1910	do.	540.00
Construction 3 cottages, sick officers	1910	do.	10,125.00
Converting small building into dwelling	1910	do.	1,800.00
Repairs to "Kit Carson" house	1910	do.	1,141.75
Generating set	1910	do.	2,125.00
Two centrifugal pumps	1910	do.	2,478.00
Small addition to power house	1910		Day labor
Electric mains, sick officers' quarters	1910	Naval hospital fund	540.00
Oil-burning equipment for oven	1910	do.	1,079.50

Construction undertaken or completed—Continued.

U. S. Naval Hospital.	Year.	Appropriation or fund.	Amount.
MARE ISLAND, CAL.			
Grading tuberculosis camp.....	1907.....	Repairs.....	\$500.00
Tiling kitchen, pantry, and dining room.....	1909.....	do.....	4,600.00
Pole line for carrying wires.....	1909.....	do.....	500.00
Pump and improving water system.....	1910.....	Naval hospital fund.....	5,500.00
Fitting strong ward for prisoners.....	1910.....	do.....	245.00
Painting hospital.....	1910.....	do.....	2,665.00
Infectious-disease building.....	1910.....	June 29, 1906.....	8,000.00
Do.....	1910.....	Naval hospital fund.....	
Power house.....	1910.....	June 29, 1906.....	5,000.00
Do.....	1910.....	Naval hospital fund.....	
Surgical ward.....	1910.....	June 29, 1906.....	12,000.00
Do.....	1910.....	Naval hospital fund.....	
Electric elevator.....	1910.....	do.....	4,385.00
Tile work.....	1910.....	do.....	5,984.00
Hydrotherapeutic apparatus.....	1910.....	do.....	4,042.00
Remodeling gas house into quarters.....	1910.....	do.....	6,100.00
PUGET SOUND, WASH.			
New administration ward.....	1910.....	Mar. 2, 1907.....	143,971.00
Operating and subsistence buildings.....		May 13, 1908.....	5,879.00
SITKA, ALASKA.			
Repairs to roof.....	1909.....	Repairs.....	293.00
YOKOHAMA, JAPAN.			
Purchase of land.....	1907.....	Public works.....	4,980.00
Servants' quarters.....	1907.....	Naval hospital fund.....	2,636.91
Repairs to senior medical officer's quarters.....	1907.....	Repairs.....	583.31
Painting bungalows, annex, etc.....	1908.....	Naval hospital fund.....	629.97
Painting and repair, annex.....	1909.....	Repairs.....	480.07
Painting and papering house.....	1910.....	do.....	496.51
New hospital building.....	1907 to	Mar. 3, 1903.....	24,880.08
Do.....	1910.....	Naval hospital fund.....	16,468.09
Do.....		Repairs.....	3,272.41
CANACAO, P. I.			
Artesian well.....	1907.....	Artesian well.....	5,411.88
Railway tracks, cars, etc.....	1908.....	Naval hospital fund.....	979.15
Ice-making plant.....	1908.....	do.....	3,525.00
Garbage crematory.....	1908.....	do.....	865.00
Tiling operating room.....	1908.....	do.....	1,182.00
Extension to hospital.....	1909.....	do.....	140,622.89
Allotment for ice plant.....	1910.....	Repairs.....	2,000.00
Generating set, fans, etc.....	1910.....	Naval hospital fund.....	1,458.00
Repairs to roads, buildings, etc.....	1910.....	Repairs.....	1,000.00
Additional for repairs to roads, etc.....	1910.....	do.....	2,000.00
Additional for work on buildings and grounds.....	1910.....	do.....	1,500.00
Steel roofs for buildings.....	1910.....	do.....	4,551.00
Repairs to hospital wharf.....	1910.....	do.....	1,350.00
Steel tank and tower.....	1910.....	Naval hospital fund.....	4,000.00
Building female nurses' quarters.....		do.....	16,000.00
SUPPLY DEPOT, NEW YORK.			
Erection new supply depot.....	1904.....	Mar. 3, 1903-1905.....	93,980.48
Entrance gates.....	1906.....	Repairs.....	925.00
Storage lumber shed.....	1910.....	do.....	6,604.42
SUPPLY DEPOT, CANACAO.			
Includes pharmacist's quarters.....		Mar. 2, 1907.....	25,000.00
NAVAL MEDICAL SCHOOL.			
Alterations.....	1908.....	Contingent.....	3,478.00
Cold storage, crematory, plumbing, etc.....	1908.....	do.....	3,809.21
Repairs to roof, east building.....	1909.....	do.....	499.75
Changing doors, new floors, etc.....	1909.....	do.....	346.00
Plastering walls, ceiling, painting.....	1909.....	do.....	346.50
Cold-room insulation.....	1910.....	do.....	562.86

• Yards and Docks.

Proposed construction to be paid out of naval hospital fund.

PORTSMOUTH, N. H.	
Three sets of officers' quarters, female nurses' quarters, stable, and greenhouse.....	\$100,000
Power-house building, equipment, and outside heating mains.....	50,000
Contagious building.....	35,000
Outside lighting mains and connections to yard.....	15,000
Water and sewer systems.....	20,000
Roads, walks, and improvement of grounds.....	30,000
Laundry equipment and building.....	15,000
	265,000
CHELSEA, MASS.	
Power-house plant, lighting and heating mains.....	75,000
Water and sewer systems.....	20,000
Providing contagious wards, quarters for female and male nurses, stable, greenhouse, and laundry, either in new buildings or remodeling old.....	150,000
Improvements of grounds, roads, and walks.....	20,000
Outside wiring for electric systems.....	15,000
	280,000
NEWPORT, R. I.	
Contagious building.....	65,000
Power-house building, equipment, and outside main for heating.....	35,000
Three sets of officers' quarters, female nurses' quarters, stable, and greenhouse.....	100,000
Laundry equipment and building.....	15,000
Eight hundred feet of quay wall.....	40,000
Pier.....	30,000
Water-supply and sewer systems.....	20,000
Outside lighting systems and connection to government plant at training station.....	20,000
Fence.....	15,000
Roads, walks, improvement to grounds.....	30,000
	370,000
NEW YORK, N. Y.	
Remodeling existing buildings.....	200,000
Improvement of power plant.....	50,000
Improvement of grounds, roads, and walks.....	10,000
Outside sewer, water, lighting, and heating systems.....	20,000
	280,000
PHILADELPHIA, PA.	
Improvement of grounds.....	15,000
Changes, or tearing down old buildings, etc.....	20,000
	35,000
WASHINGTON, D. C.	
Improvement of grounds.....	15,000
Sewers and water extensions.....	5,000
	20,000
ANNAPOLIS, MD.	
Modifications in existing power house outside heating, lighting, water, and sewer mains.....	15,000
Improvements of grounds, roads, and walks.....	20,000
Greenhouse.....	10,000
	45,000
NORFOLK, VA.	
Necessary connecting sewers, heating, and lighting.....	10,000
Improvement of grounds.....	10,000
	20,000
LAS ANIMAS, COLO.	
Remodeling quarters 2 and 6, now used for sick officers, for quarters for officers on duty, and female nurses.....	15,000
Improvements of grounds.....	15,000
Miscellaneous improvements.....	15,000
	45,000

Proposed construction to be paid out of naval hospital fund—Continued.

MARE ISLAND, CAL.		
Improvements of grounds, roads, and walks.....		\$15,000
Outside sewer, water, and light connections.....		15,000
		30,000
PUGET SOUND, WASH.		
One additional ward.....		60,000
Three sets officers' quarters, female nurses' quarters, stable, and greenhouse, all of wood.....		80,000
Outside wiring, lighting, and connection to yard system.....		20,000
Outside sewer and water system.....		15,000
Roads, walks, and improvements of grounds.....		20,000
Outside heating mains, power house, and equipment.....		75,000
Contagious ward.....		60,000
		330,000
PEARL HARBOR, HAWAII.		
Hospital and other buildings.....		300,000
BAGUIO, P. I.		
Hospital and other buildings.....		150,000

SUMMARY.

Portsmouth, N. H.....	\$265,000	Las Animas, Colo.....	\$45,000
Chelsea, Mass.....	280,000	Mare Island, Cal.....	30,000
Newport, R. I.....	370,000	Puget Sound, Wash.....	330,000
New York, N. Y.....	280,000	Pearl Harbor, Hawaii.....	300,000
Philadelphia, Pa.....	35,000	Baguio, P. I.....	150,000
Washington, D. C.....	20,000		
Annapolis, Md.....	45,000	Total.....	2,170,000
Norfolk, Va.....	20,000		

Summary of expenditures for hospital construction completed, under construction, and authorized in recent years (1905-1910).

	Naval hospital fund.	Repairs.	Contingent.	Special act.
Portsmouth.....	\$292,697.00	\$1,068.00		
Chelsea.....	284,375.00	1,456.82		\$19,127.13
Newport.....	333,110.00	1,058.50		40,000.00
New York.....	99,807.62	48,274.05		25,914.30
Philadelphia.....	181,667.96	13,064.41		
Washington.....	3,403.00			
Washington (M. S.).....	333,388.07	19,213.12		208,829.03
Annapolis.....	111,812.86			281,000.00
Norfolk.....	248,364.04	12,193.62		219,511.03
Port Royal.....	1,200.00			
Pensacola.....		3,760.00		25,000.00
San Juan.....		10,400.00		
Great Lakes.....	223,902.00			231,400.00
Las Animas.....	453,595.74	27,617.15		
Mare Island.....	68,951.00	5,000.00		25,000.00
Puget Sound.....				149,850.00
Sitka.....		293.00		
Yokohama.....	19,734.97	4,831.30		29,860.08
Canacao.....	168,722.04	12,401.00		5,411.88
Supply depot, New York.....		7,529.42		93,989.48
Supply depot, Canacao.....				25,000.00
Naval Medical School.....			\$9,042.32	
Total.....	2,824,731.30	168,760.39	9,042.32	1,374,892.93

DISPENSARIES.

The division of the dispensary service in Washington has not proven the success which was hoped for two years ago, and while on theoretical grounds the arrangement seemed sound whereby those on duty in

the Navy Department should receive temporary treatment in the Mills Building, and others, together with officers' families, should be accommodated with less interference in a specially equipped dispensary with proximity to the specialists which the Naval Medical School Hospital furnishes, practically the service required has not been rendered economically or satisfactorily to the convenience of patients. Distance and comparative inaccessibility have somewhat defeated the promised advantages, and as soon as suitable space can be afforded near by departmental headquarters it is contemplated to administer this service from a single establishment under the supervision of two experienced officers, one of whom will be constantly available during office hours, while the other is serving those requiring attendance at their homes or fulfilling appointments in eye, ear, throat, or other specialties. Under present conditions it frequently happens that those who do not find it convenient to repair to the hospital dispensary send for the attending surgeon when the nature or gravity of the affection does not justify such visits to the homes of officers.

Exclusive of the consultations and visits of the specialist in diseases of the eye and ear, the report of the dispensary at the Naval Medical School Hospital for the last fiscal year shows 2,350 visits, 1,307 office consultations, and 4,583 prescriptions filled. The visiting surgeon states that he has placed a liberal interpretation in treating "the enlisted men not provided with medical attendance" by caring also for the families, widows, and children of those on the active list or of those retired for disability or long service and that—

while it makes additional work, as a rule this privilege has not been abused. Except in serious emergency cases I have declined to visit the servants of naval officers on the active and retired list living in Washington, for to start such a precedent in my opinion would be most unwise, and aside from the other considerations it would be a physical impossibility for any one medical officer with that additional work to perform the present necessary duties.

NAVAL MEDICAL SUPPLY DEPOTS.

Following recommendations which the bureau has solicited from meetings of the medical officers of the Atlantic and Pacific fleets, the allowance of surgical dressings, material for prophylactic work, and certain other items of the supply table have been increased or modified, but a thorough revision of the supply table has not been deemed advisable. It has not been found practicable, as originally intended, for either of the hospital ships *Relief* or *Solace* to act as supply ships. The Naval Medical Supply Depot at Brooklyn, N. Y., filled 647 requisitions, to the value of \$236,520.51, during the fiscal year 1910; the depot at Mare Island, Cal., filled 144 requisitions, invoiced at \$32,067.60; and that at Canacao, P. I., 144 requisitions, amounting to \$16,375.70. Quite as much as ever before, the work of these three depots appears to have been performed effectively, expeditiously, and economically; practically the only complaint has been an unavoidable small amount of breakage due to transfer of packing cases from ships and lighters.

PRISONS AND PRISON SHIPS.

The experience of and reports from medical officers on duty with prisoners during the past year furnish little for comment beyond what has been said in former reports. There appears to be agree-

ment that ships are, from their inherent sanitary limitations, not adapted for purposes of long confinement; the report from the *Southery* and *Topeka* at Portsmouth, N. H., refers to muscular rheumatism as being prevalent from ship life in that climate, but while the admission rate for rheumatic affections is somewhat higher than for four other groups of the personnel, Table 19 indicates but two classes of disease in which the incidence rate for prisoners is higher than the mean for the whole service, viz, tuberculosis and mental disease; the former is not greatly in excess, while the latter is seriously so, more than two and a half times as high. The absence of admissions for neurasthenia among prisoners is curious and hardly consistent with the prevalence of insanity; provision for regular employment of prisoners is urged along lines which would tend to fit them for future usefulness and at the same time occupy their minds with better prospects which should improve their mental health; while in most instances these men are not criminals, the nature of their offenses indicates an improperly directed mentality which merits the careful study and supervision of a practical alienist; it would doubtless be of great advantage to eventually have available on each of the three stations a medical officer trained in psychiatry to serve as a consultant for each fleet and to cooperate frequently with the officers of each prison for the early detection of psychopaths.

TRAINING STATIONS AND RECEIVING SHIPS.

General interest in sanitary conditions at training stations is largely centered in the prevalence of "special diseases," which have been discussed in the section so headed, because they seem to have more influence upon administration and hinderance to training than do the more academic problems of sanitation which are more insidious although perhaps as far-reaching at other stations in the service at large. The limitation of infectious disease appears to depend upon three factors, efficient segregation of new recruits for the first month until the incubation periods have been passed, the nature of abode, and finally climate; early segregation has accomplished its ends at Newport, and during the past year at Norfolk, while at San Francisco there is still much to be desired. All observers are probably prepared to admit the decided superiority of barracks over ships for quartering recruits, but the still more eminent desirability of providing small unit barracks instead of the large barracks has not been so fully appreciated; unit barracks at Norfolk, when segregation is properly carried out, together with its superior climate, have favored the reduction of contagious disease to a minimum to which the stations at Newport and San Francisco can hardly attain until they are removed to a southern climate and made capable of prompt segregation whenever it is indicated. The lessons learned at these stations should soon be applied to receiving ships so far as possible to the end that proper barracks shall eventually displace them; as an example, the *Hancock* has necessarily inadequate sanitary facilities for the large bodies of men at times quartered on board, and all vigilance can not be depended upon to prevent the spread of contagion brought on board by new drafts or by liberty parties; in the event of an outbreak the entire crew is apt to be quarantined and important transfers prevented which should not be the case with segregation

barracks; when the ship is crowded, existence is only by a makeshift way of living, which can not but react unfavorably upon the early impressions of new men and their friends.

Reports from the *Hancock* stated:

There were 6 cases of diphtheria, 27 of scarlet fever, and 6 of measles. But 1 case of mumps appeared, and 3 of typhoid fever.

The scarlet fever appeared in epidemic form in the first and second quarters; it was fortunately limited to the men quartered on board, and most of those affected were in the electrical class which is housed for instruction during the day in building 14 of the yard. The medical officer of the yard, in conjunction with the efforts of the surgeon of the *Hancock*, employed such methods as appeared necessary in the ventilation and disinfection of building 14; all the usual precautionary measures were taken while recruiting, and transfers were discontinued for the time being. The sick cases occurring in the last quarter were transferred early as being suspicious cases, and precautionary measures taken. No further cases developed.

The surgeon of the *Wabash* reported:

To give additional room, to promote the health and comfort of the crew and facilitate the messing, I strongly recommend that a mess hall be built ashore on the reclaimed land near the ship, to include galley and bake shop, and with ample accommodations for stores and the simultaneous messing of those attached to the ship. At present all hands can not be messed at one time, thus necessitating the resetting of the tables twice or more times according to the number to be served. Under present conditions the food suffers from the long wait between cooking and serving; in this connection a suggestion worthy of consideration is to discontinue bringing food supplies on board which is not only difficult but at times dangerous, as the facilities for their transportation are bad on account of the gangway being awash or frozen over.

The space occupied by the galley would be valuable for berthing, and its removal in conjunction with the messing on shore would promote a better hygienic condition of the living space of the gun deck.

There has been a constant increase in the number of men handled on board this ship, and any measures tending to relieve the congestion are not only at the present time desirable in the highest degree, but in the near future are likely to prove absolutely necessary.

On the *Independence* "in February, there was an epidemic of mumps and measles, 50 cases of the former and 37 of the latter being admitted. The ship was in a partial quarantine for about two weeks and the epidemic stopped."

The following extracts from reports from the *Franklin* are quoted:

The health of the station has been very good, and although the total number of sick days was more this year than last, 4,630 for 1909 and 3,881 for 1908, there were fewer admissions for typhoid fever and contagious diseases this year than last, but more admissions for venereal diseases.

In 1908 there were 27 cases of typhoid fever; in 1909, 5 cases; malaria in 1908, 19 cases, and 17 cases in 1909; 1 case each of cerebro-spinal fever and smallpox in 1908, and none in 1909.

Climatic conditions have been excellent, the summer months not excessively hot and the winter months short and mild, so that outdoor drills have been carried on the whole year.

The water supply is obtained from Lake Kilby, which supplies the cities of Portsmouth, Berkley, and Suffolk, and is excellent in character. Water is pumped from the city supply to a distilling plant on the station, which is in continuous use, and from the plant it is distributed through pipes to all parts of ships and station. Sanitary scuttle butts are located at convenient points on the station.

The navy ration is used, and with additional food supplies of all kinds, obtained from the local markets, the mess has continued excellent in quality, preparation, and abundance.

Excreta and sewage from the *Franklin* and *Richmond* are discharged directly into the Elizabeth River. From points on the station the discharge into the river is by underground sewers. Surface drainage has been maintained by ditching.

All refuse from the ships and camps is collected daily and burned in an improvised crematory, which gives satisfactory results. Garbage from the mess halls is removed daily by a contractor.

Heating throughout the ships and station is by steam, including the bungalows in camp, and proves satisfactory.

The physical condition of the personnel is very good, but there seems to be a tendency at some recruiting stations to lower the standard of recruits. It is believed that the physical standard of recruits should be maintained, although minor defects should not call for survey after enlistment, and the Government has paid for transportation to a receiving ship. Many of the recruits arriving here should have been rejected at the recruiting stations, for a recruit soon learns to use minor defects as an excuse to shirk duty, which defects in civil life never cause any trouble.

Drills and exercises are carried on daily and the men are encouraged in baseball, foot ball, swimming, and other sports. A modern gymnasium with swimming pool is desirable, but at present there is no appropriation for such a building.

There has been a marked improvement in the condition of contagious diseases over last year, and this is no doubt due to the present system of housing men in bungalows instead of in barracks as formerly. This system was begun in latter part of 1908. The bungalows have canvas sides which are rolled up during the day, thus securing a good airing for bedding and other effects. During the summer of 1909 the bungalows were elevated from the ground and placed on cement blocks, spit kits placed in each bungalow and steam heat installed in place of stoves, all of which improved the sanitary conditions of the camp.

Only apprentice seamen are quartered in bungalows in camp; the main camp has 152 bungalows with a capacity for 912 men, allowing 6 men to a bungalow; 50 more bungalows are expected to be added the coming year. The detention camp has 36 bungalows with a capacity of 216 men. All general detail men are quartered and mess on the *Richmond*, averaging about 400 men. All chief petty officers, artificers, and machinist's classes and marines are quartered on the *Franklin*.

The following shows number of cases of the three prevalent contagious diseases on the station for the years 1908 and 1909: In 1908 there were 104 cases of measles, 317 cases of mumps, and 40 cases of scarlet fever; in 1909 there were 76 cases of measles, 153 cases of mumps, and 7 cases of scarlet fever. There were no cases of contagious disease on the station from July, 1909, to the end of the calendar year.

Recruits upon arriving from recruiting stations pass through the following routine: They are received into a building on the dock, where they are stripped and given a hair cut, a hot bath, and a clean suit of detention clothes. Their civilian clothes are shipped back home or disposed of in whatever way the owners desire. After this the men are taken into the detention camp and examined physically, and those qualified are then issued their outfit of clothing; the apprentice seamen are held in detention camp for twenty-one days; if at the end of that time no contagious diseases have broken out, they are transferred to the main apprentice-seamen camp. General-service men, as coal passers, mess attendants, etc., are not held in detention, for lack of room at present, but are fitted out and transferred to the *Richmond*. Those who fail to pass physically or show symptoms of disease are held up for observation and are later fitted out and go to duty or a medical survey is requested.

If a case of contagious disease appears, the patient and his effects are isolated and transferred to the naval hospital, his bungalow mates, together with their effects, are corralled and held as contacts. The contacts are given a bichloride bath, their effects and bungalow disinfected; the men are then given a disinfected suit, and are held for the incubation period of the disease in question, then returned to duty. If a contagious disease breaks out in the main apprentice-seamen camp the same process is gone through. It is true that leaks occur among the men when in detention or isolation, due perhaps, for the most part, to the raw recruit's ignorance of sanitary laws, but conditions are improving, and it is plainly evident that the bungalow system is the solution of the problem of contagious diseases. Instead of having several hundred contact cases, as when quartered in barracks, with the bungalow system there are six. Another source of contagious disease is through Berkley and Portsmouth, where such diseases are generally prevalent.

The present mess hall, which seats about 700 men, has been reported as unsanitary, and there is now under construction a new mess hall, with a seating capacity of 1,000 men, which is expected to be ready for use in a short time. This building is of cement blocks and will be fitted with modern sanitary arrangements.

The number of admissions for venereal disease has been increased during 1909, but this can in some measure be accounted for by the fact that prior to this time a majority of the venereal diseases were treated without being regularly admitted to the Medical Journal

Veneral diseases.

	1908.	1909.		1908.	1909.
Gonorrhoea.....	41	343	Orchitis.....	11	7
Syphilis.....	43	78	Epididymitis.....		14
Chancroid.....	4	99	Arthritis gonorrhoeica.....	5	8
Adenitis inguinalis.....	11	35			

No compulsory prophylactic treatment had ever been instituted on this station, but during June, 1910, a special room for prophylactic treatment against venereal diseases was installed, and in the absence of compulsory preventive treatment notices were posted about the station and the men instructed to report as soon as possible for treatment after exposure. As a result, 156 men reported and took the treatment, and to date there has been but one case of gonorrhoea develop from this number.

There were 39 primary admissions for venereal diseases during the month, and out of this number only one had taken the prophylactic treatment.

Weekly inspections for venereal disease are made of apprentice seamen detailed for messmen, and cases found are put under treatment.

While it is not compulsory, prophylactic treatment is given to the few who report voluntarily, and it is evident that in order to check venereal disease by preventive treatment the treatment must be compulsory, for the large majority who have been exposed to infection never report until the disease is well marked.

Summary for the year.

Number of recruits and other men received on board.....	7,314
Number of applicants for enlistment:	
Examined.....	419
Accepted.....	221
Admitted to sick list.....	1,391
Readmitted to sick list.....	36
Discharged to duty.....	776
Invalided to hospital.....	471
Invalided from service.....	163
Invalided to hospital for insane.....	5
Died (suicide by carbolic acid).....	1
Average complement for the year.....	1,728
Total sick days.....	4,630
Percentage of sick for the year.....	0.7 of 1 per cent
Daily average of patients.....	12.5

The senior medical officer at the naval training station, Newport, reported:

The following will show the work performed by the hospital corps men detailed for duty in Barracks A (segregation barracks for newcomers): 1,751 bundles of clothing were sterilized and transferred to an express company for transmission to the homes of recruits. A total of 4,772 men were received and passed through the routine treatment, and money amounting to \$9,440.42 was held for safe-keeping while the men were being treated. In addition to the above, 202 bags and hammocks of patients suffering from infectious diseases were sterilized.

Barracks C: In spite of constant fumigations, airing of bedding, and other sanitary precautions, occasional cases of mumps and measles developed. Nothing in the nature of an epidemic has occurred. Cases usually appeared singly and sporadically. For the last five months, bedding has been aired daily, when practical, with a marked decrease in the number of infective diseases, including pneumonia. It would appear that the destructive influence of sunlight on contagium in the bedding has been well demonstrated. The radiators in the drill halls have been raised from the floors, freeing them from the objection of providing a place for the collection of dirt and refuse behind and under them. The mechanical ventilators situated beneath the base of the radiators in the dormitories have been removed, as they have proved to be simply dust traps.

It has been noted that when divisions are transferred from Barracks A to Barracks C some of their members were particularly physically deficient. In order that these men might have especially adapted exercise, some were selected at each time of transfer and put into a class for special setting-up exercises. This has proved very effective.

Barracks B: The heating and ventilating system installed in this building is not practicable on account of the great cost of running it. The present facilities are satisfactory as long as the barracks are not used for quartering a large number of men. They are used now as quarters for the station guard of apprentice seamen and occasionally to accommodate a division when there is reason to fear overcrowding of Barracks C.

During the summer and fall months of 1909 all open water receptacles were oiled with practically total destruction of mosquito larvæ. It was recommended to the commanding officer that all garbage cans be covered, all stable manure be deposited in a closed pit, and the shore line carefully policed for the removal of decaying organic matter, for the purpose of exterminating flies as far as possible on the station. All mess halls have been screened, so it is expected next summer the fly nuisance will be greatly abated.

A distilled water system has been installed practically all over the station, but is not yet in operation. The drinking apparatus is not yet of a suitable type and is insanitary in use. A design has been recommended, which will probably be installed later.

The system of probationers for the Hospital Corps is working well with regard to the personnel gained for the corps and the practical results gained in the added efficiency at this station. The number of probationers has increased from four to six, and the number of applicants is greater than can be handled. Inasmuch as a number of these men are sent to sea, it has been deemed advisable to give them some practical instruction along surgical lines (preparation of patients, dressings, etc.). With a view to this, a number of operations of minor character have been performed, such as the removal of tonsils, adenoids, hemorrhoids, varicocele, phimosis, etc.

The following interesting paragraphs have been extracted from the report of the naval training station, San Francisco:

The unsuitability of the location of this station, both from topographical and climatic standpoints, has been so thoroughly pointed out and dilated upon in the annual sanitary and special reports, almost ever since the station has been in existence, that it is only necessary to indorse all that has been said and to give the statistics of another year to support the former opinions. This unfavorable climatic condition is an attribute of the littoral Pacific slope, throughout the winter months, from its northern boundary to Point Concepcion on the south. The large majority of recruits come from sections of the country wherein the environment is radically different, and the element of slow acclimatization is an important factor in the production of a large sick list. Except for numerous fogs, the summer climate may reasonably be said to be good. In addition to the figures of the sick list during the winter months, there is a daily average of fifty patients, almost entirely apprentices, treated for bronchitis, tonsillitis, and other diseases of the respiratory system.

Not less contributory to the result is the barracks building. The sleeping quarters for the apprentices is practically one vast, open space, with the windows placed directly opposite and at the same elevation as the hammock billets, rendering proper ventilation impracticable and impossible. An open window results in a direct draft upon the sleeper, a closed one in a vitiated atmosphere. In addition to this, the location of the windows is too low (with reference to the roof) to admit of good ventilation. This has been corrected in a measure by the installation of hooded ventilators in the roof. Many of the huge supporting beams are made of unsurfaced lumber, which have been whitewashed. The difficulties in heating, ventilation, and disinfecting a building of this type are apparent. There is so little level territory on the island that it is problematic as to the possibility of a sufficient amount of appropriate space for the construction of a barracks building conforming to approved ideas as to the housing of the number of men it is necessary to accommodate at this station. The drill ground in front of the barracks building is said to be too small for drill purposes, and it undoubtedly is not large enough for proper recreation.

The epidemics which have prevailed on the station during the past year include cerebro-spinal meningitis, mumps, measles, chicken-pox, and scarlet fever. Nine cases of cerebro-spinal fever, with a mortality of two, occurred in the early part of the year. All cases were treated with Flexner's serum as soon as the diagnosis was confirmed by the microscope. The large number of cases of mumps occurring at the close of 1908 continued into the present year; a total of 329 cases is to be noted. Rigid disinfection of cuspidors and the abandonment of the drinking cups may have been largely responsible for the gradual diminution in the number of cases. At the close of the year, only four cases were under treatment. Of the remaining epidemic diseases, the number of cases was not great.

The following comparison by quarters of 1908 and 1909 show a decrease in the percentage of sick as follows:

	Average comparison.	Daily average patients.	Total sick days.	Percentage of sick.
First quarter:				
1908.....	1,064.6	70.8	6,457	6.67
1909.....	1,234.7	50.3	4,527	4.7
Second quarter:				
1908.....	985.1	39.7	3,613	4.3
1909.....	1,291.8	36.3	3,308	2.8
Third quarter:				
1908.....	1,245.9	38.8	3,228	2.8
1909.....	1,221.7	34.5	3,153	2.8
Fourth quarter:				
1908.....	1,087.3	42.2	4,535	4.5
1909.....	1,138.7	30.8	2,845	2.7

Total sick days 1908, 17,833; total sick days 1909, 13,843.

There were 6 deaths during the year, the causes thereof being: spinal meningitis, 2; drowning, 1; empyema, 1; dislocations, 1; intestinal obstruction, 1. Eighty-four have been invalided from the service and 17 transferred to hospital.

The total number of admissions for the year was 1,177 and readmissions 44, giving 1,221 admissions, representing 13,843 sick days. The following tabulation shows the more important diseases and injuries contributing to the sick list:

Mumps.....	329	Skin diseases.....	8
Pneumonia and broncho-pneumonia.....	325	Lymphadenitis.....	7
Veneral diseases.....	167	Dermatitis.....	6
Measles.....	101	Typhoid fever.....	5
Bronchitis.....	97	Alcoholism.....	4
Tonsillitis.....	45	Appendicitis.....	4
Malarial fever.....	42	Amœbic dysentery.....	4
Eye diseases.....	34	Piles.....	4
Abscess.....	29	Vaccina.....	4
Heart disease.....	29	Jaundice.....	3
Arthritis.....	22	New growths.....	3
Ear diseases.....	21	Pleurisy.....	3
Fractures.....	15	Rheumatism.....	3
Nervous diseases.....	15	Burns.....	2
Deformities.....	13	Constipation.....	2
Grippe.....	13	Scarlet fever.....	2
Contusions.....	10	Varicocele.....	2
Rupture.....	10	Asthma.....	1
Spinal meningitis.....	9	Drowning.....	1
Sprains.....	9	Erysipelas.....	1
Tuberculosis.....	9	Nephritis.....	1

HOME YARDS AND REPAIR STATIONS.

The few sanitary problems pertaining to shore stations not already comprehensively discussed in former reports are either discussed in a former section or are brought out in some of the following selected reports:

Naval Torpedo Station, Newport, R. I.—The station has a well-equipped chemical laboratory and employs a chemist. The laboratory and the services of the chemist have been available in the development of radiographs and water analysis in connection with medical department work. This service might be extended, with advantage, to the analysis of food supplies, with the approval of proper authority, and some few additions in the way of chemicals and apparatus.

Navy-yard, Philadelphia, Pa.—The new disinfecting plant is complete except as to some minor points and has been turned over to the medical department and put into service. It is considered to be a most valuable adjunct to the sanitary equipment of the yard, both for routine work and for the effective handling of epidemics.

Its location was changed by authority of the department to a very central point at the southwest corner of block 61, where it is now very convenient and is being extensively used by the medical officers of the yard and ships.

A new dispensary should replace the present building which was formerly the commandant's office and now occupies ground which is ultimately intended for other purposes. The southeast corner of block 61 is considered to be the most suitable site for the new building.

Quarters for a pharmacist or hospital steward should also be built, but should in my opinion be separate from and yet connected with the dispensary by a covered passage.

The second story of the dispensary should contain an ample storeroom, photographic dark room, and a room for the use of the examining boards, with adjoining dressing and toilet room.

The plan followed in several yards of utilizing the second story as quarters for the pharmacist or hospital steward has great disadvantages both from the point of view of the medical officer and that of the occupant of the quarters; a small emergency hospital, also adjoining the dispensary, would prove a very valuable feature which it is hoped may be authorized.

Treatment of all cases of malarial infection was insisted upon, continuing after the last chill for a period of two months with a ten-day interval after six weeks. Relapses were very few and the statistical record shows but 23 admissions for malarial disease as compared with 114 for the previous year.

Owing to the work of reconstruction in progress there have been no facilities at the naval hospital for the care of contagious cases and the smaller buildings of the group of temporary structures on the eastern end of the island known as the "camp" have been utilized as required for isolation of such cases. They are by no means ideal, but in a crude way have answered the purpose; they have been used not only for the sick of the yard but for contagious cases appearing on ships at the yard. Some of these were not formally transferred but remained attached to the ships.

This "camp" has a suitable kitchen and is available in case of need for the care and subsistence of an entire ship's company, but for the few men who have been isolated cooked food was carried from the *Lancaster* or from the marine barracks.

Among civil employees there were treated 558 cases of sufficient importance to record, 100 being sent to their homes and 5 to hospital.

The most urgent sanitary needs at this yard at present are the continuation of the clearing away of the brush and rubbish and of filling and draining operations, the provision of better toilets, and more adequate facilities for bathing and washing clothes for crews of ships in dry dock and the construction of a suitable toilet, located near the water front, for visitors of the yard, especially for women and children for whose use there is but one toilet in the yard, located at the main gate, about three-quarters of a mile from the water front.

Navy-yard, Washington, D. C.—The general condition of this yard and the contained workshops is excellent, with the exception of the foundry. Everything that can be done for good hygiene and sanitation for the workmen and in the shops has been done, and malaria, which in the old days was prevalent, seems to have been eradicated. The one exception of the foundry is all the more glaring in its unsanitary condition when placed in contrast with the rest of this splendid plant. On April 13, 1906, the medical officer made a special report on the condition of the foundry and its relation to the sanitary condition of the rest of the yard, to which little can be added.

There still remain many things to be done to render the old marine barracks anything like modern habitations, but a step has been made and it is earnestly hoped that it will not be long before the old wooden clothes lockers will be removed and replaced by modern iron mesh ones.

Practically the same condition as to lockers obtains at the seamen's quarters with the additional objection that some of these clothes lockers are in the kitchen, and repeated efforts to have them removed have been unavailing. Other than this the general sanitary condition of these quarters is good.

If new quarters should be built for the seamen gunners, and there is real need for them, it is hoped that provision will be made for a small sick bay, where the men may be cared for during short and trivial illnesses, so that they will not lose so much time from their studies as they have to do now by being transferred to hospital.

Navy-yard, Norfolk, Va.—Among the workmen employed at the yard there were 952 cases treated, 118 of these being injuries sufficiently severe to disable the recipient

from work (in many of these, however, the only evidence was the man's statement) and which required an "immediate report;" the ambulance was used 25 times to convey injured men to their homes or to the hospital; there were no deaths.

It is recommended that the bathing and water-closet facilities for the crews of ships in dock be enlarged, as they are inadequate at present; a disinfecting plant of ample capacity is also urgently needed at this yard for disinfecting purposes in general and particularly when a ship lying at the yard happens to develop an epidemic among her crew; such a plant would be of very great help to the medical officers, either of a yard or of a vessel, in their efforts to limit an epidemic and quickly bring it to an end.

There has been considerable discussion of the desirability of providing barracks at those navy-yards where vessels may lie for long periods of time undergoing repairs, and transferring the crews of such vessels to these barracks for the time being. This plan, while offering advantages, has its objections, and it is considered not out of place here to mention several of the more important of them: In the first place, unless the ship concerned be placed out of commission, a part of her crew would of necessity be retained on board to care for the ship and its stores, guns, machinery, etc., which would require a division of the crew into two bodies and the keeping up of two separate establishments (ship and barracks). Also, at yards where a number of large vessels assemble at the same time, the difficulty of providing sufficient barracks room would be considerable and would necessitate the building of very large barracks, or a number of smaller ones, and the ground on which to place these structures may not be available.

The time during which a man-of-war is detained at a navy-yard could be, in one way at least, very profitably spent in exercising the crew on shore, if done under conditions as nearly like those of actual service as would be possible. Much more time could and should be given to such practice while ships are lying at navy-yards.

The ship's company, as far as could be allowed at one time, should be exercised on shore and under service conditions as frequently as possible, and also should spend some time in camps, organized and equipped as in military operations. Such exercises as outlined above would be very beneficial to the service, in a military sense, and would greatly improve the physical condition of the men taking part in them. The hospital corps of the navy is especially in need of more systematic and extended exercise in the practical application of such duties as would be required of that body in military campaigning on shore, and a completely equipped hospital corps should always accompany a ship's battalion when sent ashore for drill.

U. S. S. Texas, Navy-yard, Charleston, S. C.—No serious illnesses, epidemic or endemic, have been encountered, other than malaria. During the summer and early autumn a decided prevalence of tertian cases occurred, originating, however, in approximately 90 per cent of the cases, not in this yard, but in the suburb of Chicora, a residential section adjacent, visited by chief petty officers and enlisted men. The navy-yard was kept well oiled, but a succession of heavy rains just before the onset of the epidemic nullified largely this work.

Aside from this morbidity the Charleston yard is the most happily situated station from a climatic aspect that I know of inside the limits of the United States. Respiratory diseases of importance are rare. I have not seen a case of pneumonia in the past year. The city of Charleston is not in a bad condition venereally; that is, by comparison with other large navy-yard towns. The climate is such that an open-air life and outdoor sports are possible for practically the entire year. Charleston, however, presents few attractions to the men on liberty, and it would be a great boon if something in the line of a naval Y. M. C. A. could be provided.

Naval station, New Orleans, La.—From June to January 1 there has not been a single case of venereal disease where prophylactic measures were taken even several hours after exposure. Only one case has occurred where prophylactic measures were obtainable, and this man neglected to carry out the instructions. The other cases occurred among men where prophylaxis was impracticable, as on the naval militia ships and among the stragglers from visiting ships.

If the prophylactic treatment is taken within twelve hours after exposure, the medical officer is of the opinion that venereal diseases will be reduced by 90 per cent.

Navy-yard, Mare Island, Cal.—A number of more or less severe cases of lead poisoning have occurred among the laborers who chip paint from double bottoms or other confined spaces. To prevent such accidents in the future, the following recommendations were made:

1. No man should be employed at this work for more than six consecutive days.
2. Workmen should carefully wash their hands and faces with soap and hot water before eating.
3. While at work the nose and mouth should be covered by a respirator.

It has not seemed necessary to occupy the considerable space frequently taken to say something about each shore station and receiving ship, and only such extracts have been taken as seem to possess some special interest. The continued value of monthly sanitary reports deserves emphasis, for on nearly every station there is evidence that sanitary defects are more promptly investigated and remedied.

Liability act of May 30, 1908.—Upon the request of the Department of Commerce and Labor for a delegate, Surg. N. J. Blackwood was appointed to represent the Navy Department in a conference held in March, 1910, to consider methods for the operation of the act and recommendations for any necessary changes in the law itself. The bureau has not considered that the care of the civilian force of a navy-yard, beyond aid in emergency, or the investigation of cases being treated outside of the reservation, indemnifiable under the administration of another department, properly devolve upon the naval Medical Corps; upon changes suggested by the conference looking to the examination of all employees, the keeping of records and the following up of all disabilities the bureau indorsed:

* * * The application of the act of May 30, 1908, under the suggested amendments and proposed regulations to the naval service is practically impossible in all its provisions with the present detail of medical officers. There are in the employ of the navy at navy-yards and stations approximately 20,000 laborers and mechanics within the purview of this act. By consulting paragraph 6, "Examinations," of the proposed regulations; paragraph 18, "Indorsement of claims;" paragraph 25, "Special examinations;" and paragraphs 34 to 38, "Medical officers," it will readily be seen that it will be a physical impossibility for the medical officer of a navy-yard to conscientiously perform these duties and at the same time attend to his duties in the navy-yard. At the navy-yard, New York, there are 4,100 employees; at the navy-yard, Washington, 3,200; at the navy-yard, Norfolk, 2,600; and at the navy-yard, Mare Island, 1,800. It would be necessary to detail one officer at each navy-yard and station for this special duty alone, and at some of the larger yards, as above mentioned, a detail of two officers would probably be required. To illustrate, it is known that employees of the Washington Navy-Yard live not only in all parts of this city, but some in Alexandria, Anacostia, Laurel, Baltimore, and in suburban places. To keep track of and properly examine cases of injury to employees, the medical officer should be free from all other duty. * * *

The bureau doubts the legality of the assignment of medical officers of the navy to this duty without further statutory authority, and with the Medical Corps at its present number would be unable to assign a sufficient number of officers to carry out the provisions of the law.

If these proposed regulations should be adopted and made to apply to navy-yards and stations, additional medical officers would be required, and provision should be made for their transportation expenses.

The following comments of medical officers were extracted in January, 1910, for the department from sanitary reports from the stations designated:

Boston.—The most important work of the yard dispensary during the year has been that in connection with the accidents sustained by the civilian employees of the yard and the examination of officers taking the physical test. Nine hundred and forty-eight accidents have occurred during the year among the yard employees, of whom there are about 2,000 when the full force is working, as it has been most of the year. This accident work has excited especial interest, as it is the first year that the new law under the "liability act" has applied to the yard workmen. There have developed various absurdities and abuses under its operation that should be corrected. All the questionable cases arising under it are those in which the Government is imposed upon. I desire to cite certain instances which have developed under the operation of this law.

The yard surgeons see and dress the injury when the accident occurs, send the man home, and report to the head of department the accident and an estimated length of

time that the patient will be incapacitated. At the expiration of the period the employee is reexamined and either reported in condition to go on with his work or the time is extended. During the time the man is laid off he is supposed to be under the care of his private physician, from whom he is required to bring a certificate when he comes back, this certificate stating that he has been under the doctor's care and unfit for work. Right here it may be said that the yard surgeons and the civilian physicians are often brought into conflict over these certificates. Many of the certificates are most extraordinary documents, some using a good many words to say nothing and others making statements that seem most improbable.

What seems to me to be a most unfortunate proviso of the law, and one giving rise to most of the abuses under the law, is that a workman receives no compensation for the days he is off without he is absent fifteen days or longer; if he is away over fifteen days, he receives full pay for the entire time that he is laid off.

This provision of the law is responsible for a large part of the trouble that we have with the workmen, for it is responsible for turning almost every man who receives any not very serious injury into a malingerer; and he is almost always able to get some doctor to give him a certificate to support him. I see injuries that on board ship would scarcely put the recipient on the sick list for a day magnified into an injury that keeps a man off work fifteen days. They are generally ready to come back to work as soon as they have got the fifteen days of disability in. When men are complaining of severe pain in a part on motion, and are backed up by a physician's certificate that it will be dangerous for them to work before a certain time, it is hard to say officially that it is not true, although one may be morally sure that they are exaggerating and misrepresenting.

To a certain extent I sympathize with the men, as I think the law is unjust and unreasonable. If the Government is going to recompense a workman who is injured in its employ, I do not see why it should discriminate as to the number of days. The man is as much entitled to the beneficence of the Government for an injury that lays him off ten days as for one that incapacitates him for twenty days. I understand that in England an employee receives, when he is injured, his full pay for a certain period after the injury and then for each succeeding period of the same length a proportionate part of his pay is deducted, which appears fairer and more reasonable than the law under which we are working.

There is a large class of cases in which the original injury is some not very serious cut, abrasion, or contusion, but, by neglect or improper treatment, the wound becomes infected and a serious condition results. The original injury properly cared for should have healed in a few days, but as a result of neglect the case runs on for several weeks. Such cases are no more the result of injury from the man's work than they would be if the injury were received at home outside of working hours. These men, it seems to me, are not entitled to compensation from the Government for the time they are laid off, even if the original breaking of the skin did occur while at work, as the real incapacity is due to their own carelessness.

Another class of cases fail to report as ordered when the injury occurs, but report several days later and claim that incapacities which they then have are due to the injuries which occurred previously. In some cases, of course, it is easy to establish the truth of the claim, but in others there is often a suspicion that the injury in the yard had nothing to do with the case; yet it is seldom possible to throw sufficient doubt on the claim to reject it.

There are some cases, while not exactly abuses under the law, still give rise to disability for a length of time out of proportion to the nature of the injury. These are cases of old men, of whom there are many employed in the yard, some of them over seventy years old. Injuries which in younger men would be of little importance and soon recovered from make very slow recoveries in these old men whose recuperative powers are below par, and at times normal motion is never restored to injured joints. In some patients the shock to the nervous system is so profound that they are permanently incapacitated.

A number of cases are seen in which, after an injury that has incapacitated a man, he recovers to the extent that he is much better and could do much useful work, but is not able to perform the full extent of his work. For instance, a man who may operate some machine receives an injury to his hand. After a short time the hand gets much better and, while he may not be able to perform the intricate and quick movements necessary to operate his machine, yet there is much useful work that he could do about a shop. Often the man, tired of idleness when he is really not much incapacitated, would be glad to do any work that he was capable of doing, and it would help out in the work of his shop to be able to use his services. But that is made impossible by a decision of the Secretary of Commerce and Labor who ruled that the employee could not return to work until he was entirely recovered and able to resume the work that he was doing when injured.

It would be a valuable assistance in the performance of the duty, in connection with the injuries of the civilian workmen, if this office were equipped with an X-ray machine. Many of the injuries are to the foot and hand, and it is often very difficult, when the part is much swollen, to definitely determine if the small bones of these members have been fractured or not. Cases are seen where careful examination has not shown anything but a contusion; the patient goes out for a few days and returns with a certificate that a metacarpal or metatarsal bone has been broken, thereby much prolonging the case. I suppose in some of these cases there really has been a fracture that needed an X-ray picture to demonstrate it, but in some of them I am skeptical of there having been anything more serious than a contusion. If an X-ray machine were available it would enable the surgeon of the yard to decide the case on its merits.

Therefore I suggest the following modifications of the operation of the liability act: First. That the provision that no compensation be paid unless the employee has been incapacitated fifteen days be revoked.

Second. That some rule be established that takes away the compensation when the disability is needlessly prolonged by the employee's own carelessness.

Third. That more stringent instructions be issued that an employee must report to the surgeon of the yard whenever an accident occurs, and that, failing to do so, he will not receive any benefit under the act.

Fourth. That an amendment be enacted authorizing injured men to do such work as they may be able to perform, when the injury only partially incapacitates or when it has been partly recovered from.

Fifth. The equipment of the yard with an X-ray machine, to make more efficient the examinations.

New York.—The greater part of the work of the medical department of the yard has been taken up in consideration of the civil force. As a matter of expediency and humanity, civilian employees have always received due care in case of injury or acute illness occurring during the hours of employment. Since the enactment of the law awarding a continuance of pay to civilian employees for injuries received during the performance of work, many new features have developed and the amount of work involved in keeping necessary records has largely increased. The record requires in every case an identification of the individual concerned, the diagnosis and prognosis of his injury, how received, treatment rendered, manner of disposing of the patient after his first appearance at the dispensary, progress of the case, and his final recovery and report of fitness to resume work. Constant reference is made to these records. The Bureau of Commerce and Labor makes many inquiries to determine the status of cases of injury, so there is a necessity for great accuracy and the recording of many details. Some confusion at first resulted owing to the amount of necessary clerical work and the lack of established rules to guide. A card catalogue system was early resorted to so that the task was simplified.

In the period covered in this report the following summary will show the character of injuries received:

Abrasions.....	90	Hernias.....	6
Abscesses.....	7	Incised wounds.....	144
Burns.....	103	Infected wounds.....	68
Contused wounds.....	379	Illnesses.....	76
Contusions.....	342	Injuries to eyes.....	553
Dislocations.....	5	Lacerated wounds.....	424
Deaths from—		Punctured wounds.....	192
Heart disease.....	1	Sprains.....	93
Drowning.....	1		
Electrical shock.....	1	Total.....	2,410
Fractures.....	15		

Of these cases 62 required the use of the yard ambulance.

The large number of eye cases calls for some comment. It includes everything from a simple case of foreign body in the eye to severe contusions and lacerations involving loss of vision. These injuries are confined largely to those in certain employments, such as chippers and calkers, drillers, machinists, riveters, and tool sharpeners, whose work renders their eyes liable to injury from flying particles. Aside from the disadvantage to the individual, these eye cases involve a material financial loss to the Government. Examination of the records at this office for the period from November 1, 1908, to November 23, 1909, showed that the Government had paid several hundred dollars to men suffering from injuries to their eyes and unable to continue work. These cases were only the more severe ones and continuing over two weeks. The total loss to the Government from these cases must be considerable. Even the simplest cases mean an hour or more cessation of work or imperfect work.

These facts were brought to the attention of the commandant, who appointed a board to consider the matter. This board recommended that certain employees peculiarly exposed should be provided with suitable eye protectors.

No cases recorded thus far have been due to carelessness, willfulness, or drunkenness. A few are recorded as being due partly or wholly to old age or preexisting disease. A large percentage of cases reporting may be regarded as not serious and take the employee from his work only for a brief period, say one to five days.

The large number of physical examinations made at this office for various purposes disclose many physical defects among the civilian employees. These do not necessarily interfere with satisfactory performance of labor, but they are often a menace to the safety of the individual concerned, and may lead to confusion when an injury occurs, as to the justice of awarding compensation. Among these physical defects are heart disease, hernia, deformities from former injuries and operations. Epilepsy has been found in some instances.

The decrepitude from old age is a source of disadvantage to the Government. It predisposes to accidents, and the recovery therefrom is prolonged.

These defects, together with old age, suggest the advisability of requiring a standard of physical excellence, to be determined in each case before accepting him for employment.

Ignorance and poverty of a man injured often lead to lack of proper treatment, or treatment may be sought from incompetent persons, and recovery thus delayed.

Philadelphia.—In my opinion, the working of the "disability act" for the relief of civil employees is, in several respects, very unsatisfactory.

No preliminary or periodical examination of workmen being required, some are employed who are physically unfit for the proper performance of their duties. Under existing circumstances a man disabled by age or illness, as, for example, one who suffers from vertigo, the result of a disease of the heart or blood vessels, in case of injury becomes a charge on the Government, although the preexisting disability is primarily or solely the cause of the injury.

In some cases, such as hernia, with which a workman may appear claiming that he has been injured by a sudden strain, it is impossible to determine whether the injury was received as stated by him or the condition has existed for years.

Often a reasonably accurate estimate of probable duration can not be made immediately after injury is received, and the matter of compensation then rests practically in the hands of the physician who signs the disability certificate.

It is but natural that there should be a tendency toward the employment of a physician on whom the patient feels that he may rely to sign a satisfactory certificate, and there is no provision for ascertaining the professional standing of the physician making the report.

The difficulty of investigation and following the progress of cases is increased by the fact that many yard employees live in suburban towns in Pennsylvania, Delaware, and New Jersey, at some distance from the city of Philadelphia.

A man who is carried on the rolls as disabled by injury not only draws full pay without the expense of getting to and from the navy-yard, but is also not subject to discharge when otherwise, by reason of lack of work, his services would not be longer needed.

By no means all or a majority are to be considered as open to suspicion, and many men request to be allowed to return to work when they are still inconvenienced by the result of injury, but there undoubtedly exists a strong incentive to prolong the period of disability.

In accordance with a request made by the naval constructor, four employees who were carried on the rolls as disabled were ordered to report for examination as to their ability to perform light duty, and each of them was, in the opinion of the medical officer, found to be capable of performing either all or a part of his duties.

In a number of cases men have reported with the statement that they had been injured from one to ten days previously.

I would recommend that the rules governing the compensation for injured be modified to provide that in order to receive the benefits of the act: (a) An injured man should have to report at the dispensary as soon as practicable after the injury is received; (b) that if able to travel he should report to the medical officer of the yard, in person, at least once a week during the continuance of his disability; (c) that the medical officer of the yard should be furnished with a weekly report of the names and ratings of the men borne on the rolls for disability compensation and authorized to investigate them at his discretion, in addition to such times as directed by the commandant; (d) that men but partially disabled and able to do some service should be required to report regularly for such light duties as they may be capable of doing.

The possibility of general physical examination of employees on their registration with the labor board and periodically thereafter should be seriously considered.

Washington.—Since the enactment of the "liability act" the work of the medical department of navy-yards has increased considerably, and the keeping of records in all cases of injury has added materially to the paper work. It has been my endeavor, therefore, to simplify that work as much as possible, and yet to have it so complete and ready of access as to facilitate the reference work for the Department of Commerce and Labor. As the matter now stands the Government assumes that all its employees are honest and healthy, and when a man receives any injury and later claims that that injury is the cause of some present condition, it takes that statement as a fact, unless it can show conclusively that such statement is in error. In other words, the Government knows practically nothing about a man's physical condition until such time as he receives an injury, and after that time must disprove the man's statement before it can prevent a fraud from being perpetrated. It therefore seems to me only reasonable that every man should have a physical examination prior to his employment, and that he should be reexamined at stated times thereafter, so that the Government may be sure of every man's physical condition prior to his injury, and therefore be able to say to what extent it is liable for his condition after that injury; such examination should be made out of working hours, and a card catalogue record of the same kept during the whole time of employment. It is firmly believed that much time is lost for which wages are paid through either the ignorance of workmen, the dishonesty of some practitioners of medicine, or the dishonest collusion of both. It has therefore been my endeavor for the past six months to prevent this as much as possible by volunteering to continue to treat injured employees beyond the stage of first-aid dressings. The results so far have been most satisfactory to all concerned, and the Government has saved money, for though a few more drugs and dressings have been expended, less time has been lost by the men and less wages paid for the time not employed, while the cases being constantly under observation, the time for return to work is practically in the hands of the Government itself, even as it is with enlisted men. With the adoption of these two main suggestions, the Government, having a complete record of the employee's physical condition both before and after his injury, will be in a position to decide exactly to what extent it is liable for any resulting conditions.

Norfolk.—Since the "government liability act" came into operation the number of workmen applying for treatment for injury has increased enormously. It is surprising to see how often disability to perform work is caused by injury that, if no compensation for lost time were given, would cause but little concern on part of the injured. A considerable proportion of these have to be re-examined from time to time, which requires report on the condition of the injury or statement as to whether or not the man is able to resume work, and, as the provisions of a circular letter of the Navy Department (February 10, 1909) are interpreted at this yard, the medical officer of the yard, or his assistant, is required to visit an injured workman at his home, should the latter state that he is unable to come to the dispensary for that purpose when directed to do so by the head of his department.

From experience here, in cases where doubt has arisen in regard to the validity of a claim for compensation for an injury, the statement of the medical officer of the yard in the matter seems to have, after all, very little weight, the decision for or against a claim resting mainly upon certificates from the civil practitioners in attendance on the case and "affidavits" produced by the claimant.

The act is in need of amendment for better protection of the Government against fraudulent claims than is afforded at present.

On February 9, 1910, the department issued "Navy-Yard Order No. 861," which requires the use of suitable eye protectors by workmen when engaged in work likely to injure the eyes.

FOREIGN SHORE STATIONS.

Each station beyond the continental limits of the United States appears to have its special problems of endemic disease, and, as will be noted from the following extracted reports, successful sanitary control depends, in most instances, upon whether the civil population and environment is wholly, partly, or not at all under the control of naval officials. A vast amount of sanitary work has been accomplished, particularly in the Philippines, Guam, and Samoa, aside from that directly influencing the naval personnel, which, by example or diplomatic representation, has been a spur to sanitary improvements

needed in the surrounding communities; these stations furnish almost unlimited opportunities for research in tropical medicine, and reports published in the Naval Medical Bulletin indicate that advantage has been taken by medical officers consistent with their regularly assigned duties.

Guantanamo.—There were six cases of pulmonary tuberculosis during the year, all imported, with the exception of one case developing in an electrician on the *Newark*; the disease was undoubtedly contracted from another electrician who was found to be suffering from pulmonary tuberculosis soon after his arrival, having contracted it prior to enlistment. The men were in close contact for several weeks in the dynamo room, and the second case developed within two weeks of the discovery of the first, the second patient having had a clear previous medical and family history and the disease being still in the incipient stage. The dynamo room was at once disinfected upon this discovery, and up to the present time there have been no further cases.

According to the chart of venereal diseases at various stations for 1908, on page 77 of the Surgeon-General's Annual Report for 1909, Guantanamo heads the list with an admission ratio of 350 per 1,000. This high venereal morbidity is due in great part to the venereal cases transferred to the *Newark* from the various gunboats in Cuban waters, viz: During the last quarter, 1909, out of 25 admissions for venereal diseases, 11 were received on board from other ships, and out of a total of 114 sick days for venereal diseases for the same quarter, 56 sick days are credited to the above-mentioned cases—practically 50 per cent. [This comment well illustrates one advantage to be gained from the new health record, from which such cases will be recognized as readmissions and not be credited to the local station.]

In regard to the enforced prophylaxis of venereal diseases, this measure has been tried twice during the past year, but without sufficient success to warrant its continuance, the cause of this being the scattered and varied stations of the men, some living on shore, others on tug and water barges; for out of 230 men on the station only 137 live on the *Newark*. The fact that forty-eight hours liberty is granted every week makes prophylactic treatment uncertain, and added to this is the lack of space, the treatment having to be given in the sick bay or bathroom on the *Newark*, when the men have to pass through the sick bay at great discomfort to the patients berthed therein.

There were 52 admissions for malaria during the year, 36 of these during the first quarter, being principally from marines who had contracted the disease in Panama and who were either immediately or very shortly after ordered to Guantanamo. The disease is endemic in the surrounding Cuban villages, and as workmen from these villages are constantly on the target range, and many of them living at home are not under sanitary control, a number of cases have developed on the range, although the range officer has taken all steps possible in regard to drainage and clearing the undergrowth. Both on the range and at Fisherman's Point, however, there are too few men available for systematic anti-mosquito work.

Camp Elliott, Isthmian Canal Zone.—The venereal sick rate was greatly decreased during 1909 by a compulsory system of prophylactic treatment, all men returning from extended liberty being required to report at the sick quarters. It was noted that gonorrhoea and syphilis were to a great extent prevented by this treatment, but that its effect in preventing chancroid was not so marked.

The stools of 42 men, taken at random from the command, have been examined for the ova of intestinal parasites, with negative results in 41 cases; the other case was positive for the ova of *Tænia saginata*, but gave a history of infection prior to arrival on the Isthmus. These findings are in accord with those at other points on the Isthmus—that while the native population is highly infected, the white population seldom acquires a successful infection.

The camp is in good sanitary condition. Though the past month, June, 1910, inaugurated the rainy season, the health of the command has remained excellent, and virtually no malaria developed. This is no doubt due to the great improvement in the drainage of the camp and to the excellent police work, both of which combined have made the camp one of the healthiest places on the Isthmus.

During the month a section of the guardhouse was changed so as to provide adequate means of carrying out sentences of solitary confinement, a series of four individual dark cells being built. While the medical officer does not, as a rule, approve of sentences of solitary confinement on bread and water in the Tropics, nevertheless it is believed that no man's health will suffer by incarceration in these cells for short periods.

The venereal list during the month has been very low, and it is believed that the results of enforced venereal prophylactic treatment are now being made apparent.

The morbidity for the month was 6.58 per 1,000, of which 0.97 per 1,000 was due to malaria. The daily average of sick was 3.17 patients, of which 0.46 was due to malarial infection. The low sick rate, and more especially the low malarial rate, is remarkable for the Tropics. In the opinion of the medical officer, the secret of their good health lies with the men themselves, for he believes that in the case of this command at present the men are, in a literal sense, "working out their own salvation."

Cavite, P. I.—Under date of June 26, 1909, the acting surgeon of the yard reported to the commandant:

Both Cavite and San Roque are on sandy soil but a few inches above tide level. I am told that there are about 3,000 people living in Cavite and about 8,000 people in San Roque. Little attention is paid to sanitation in Cavite, and almost none at all in San Roque. Certain localities in San Roque—Calle del Rosario, for instance—are indescribably filthy. In the vicinity of Calle del Rosario many cases of cholera have arisen in the past two years, and the fact that the disease had not spread through San Roque like wildfire, as I feel sure it will some time do, is little short of miraculous. Little or no attempt is made to drain or fill in the low ground, and the tide water and rain water are permitted to stand in stagnant pools for months at a time or until it evaporates. There are no public water-closets in the vicinity of Calle del Rosario and only an occasional private excuse for one. Men, women, and children defecate and urinate in any convenient spot, or, if too sick to leave their nipa shacks, their excreta is carried out in night pots and thrown upon the low, filthy ground, and it soon finds its way into these stagnant pools. The stench arising from these pools to greet the nostrils of the passer-by can better be imagined than described. That the natives themselves can tolerate it year after year without making the slightest effort to abate the nuisance is an inexplicable wonder. Many cases of cholera, tuberculosis, bronchitis, pneumonia, pleurisy, gastro-intestinal catarrh, malaria, and intestinal worm infections arise in these localities and are more or less constantly present. Men, women, and children, pigs, chickens, cats, and dogs are closely crowded and live all together.

A short distance from these filthy lowlands are the Japanese and Filipino houses of prostitution, which add venereal disease to the already long list of infectious diseases engendered by the insanitary conditions; and but a short distance farther from these lowlands is the large and almost equally filthy San Roque market, at which place is sold to Americans and Filipinos alike fish, meats, rice, cereals, and fruits which have been handled many times by dirty Filipinos from these disease-infected spots.

Many vain efforts have been made both by medical officers of this station and by the very few local Filipino physicians to improve these insanitary conditions, which are so prejudicial to the health and life of every individual, American or Filipino, living in Cavite or San Roque. Particularly active in this campaign for better sanitary conditions in San Roque has been Dr. Roberto de Leon, a member of the so-called "board of health" of Cavite, of which Doctor Felizardo is president. Doctor de Leon tells me that he has made numerous requests and recommendations to the municipal council of Cavite for appropriations of money for sanitary improvements, but he has invariably been told as an excuse that there was no money available for such purpose, and therefore nothing could be or has been done. Provincial Governor Leonardo Osorio tells me that his requests and recommendations have met pretty much the same fate at the hands of the municipal council of Cavite.

There are good reasons for believing that the natives of Cavite and San Roque are not only more prosperous now than at any time in their past history, but that they have more money than the natives of any other towns of like size in the Philippine Islands. Upon investigation I find that there are employed at this station each month by the United States Government more than 2,560 natives, who are for the most part inhabitants of Cavite and San Roque, and that these 2,560 natives are paid approximately \$52,300 gold per month, or over \$627,600 per annum. As a further evidence that the Filipinos have an abundance of money one needs only to make a fifteen-minute visit to either one of the two large and expensive cockpits in San Roque and Caridad on any Sunday at almost any hour between sunrise and sunset and witness the hundreds of pesos changing hands as the result of successive cock-fights. The natives of San Roque and Cavite say they have no money for sanitary improvements, but they seem to have an abundance of money for cockpits and cock-fights, for the churches, for "fiestas," and for expensive Trece Martires monuments.

Many of the backyards and alleyways of Cavite are indescribably filthy. The bakery located on Calle Real, Cavite, is a case in point. The baking room of this

establishment must be seen to be appreciated. The entire room and almost all of the cooking utensils are covered with several years' accumulation of soot, filth, and grime, all of which give rise to a very offensive odor. The dough is mixed in a large dirty box, by the dirty hands of Filipinos almost as dirty as the room in which they work. The product of this bakeshop is sold as food to Americans and Filipinos alike. I have been told by several Americans that many of the Filipinos are too lazy to use the near-by water-closets, especially in rainy or stormy weather, and their alvine and urinary discharges are thrown into the streets and alleyways, and, so far as I can learn, no arrests are ever made or fines imposed for the creation of such nuisances. These extremely insanitary conditions should be remedied at the earliest possible moment, as they are prejudicial to the health and happiness of everybody.

1. For the improvement of the sanitary condition of both Cavite and San Roque the first and probably cheapest necessity is the installation of a sufficient number of sanitary public water-closets, at most convenient and well-selected localities, and the adoption of efficient means for their compulsory use. To this end a fine should be imposed for violations of a law requiring the use of water-closets as a receptacle for all human excreta. The adoption of this single measure would go far toward improving the sanitary condition of both Cavite and San Roque, and would lessen in an incalculable degree the chances for the spread of infections like cholera and typhoid fever.

2. The next most important sanitary measure would be the efficient drainage and filling up of all stagnant pools and the grading of certain areas which require it.

3. All streets and alleys should be kept clean. All refuse and filth should be burned and not permitted to accumulate. The dead bodies of all domestic animals—dogs, cats, chickens, and pigs—should be promptly buried at a proper distance from all human habitations and not thrown into the streets, alleys, or bay to create a stench for many days, as at present.

4. A sufficient number of artesian wells should be dug in both Cavite and San Roque to provide an abundant supply of good water for drinking and bathing purposes, and thus overcome the necessity for the use of the cisterns which are at present used by the natives and which are so easily contaminated in the sandy soil, producing much disease.

5. The number of human beings which should be permitted to live in a given space should be limited, as overcrowding, especially when accompanied by such filth and insanitary surroundings as are to be found in San Roque and Cavite, produces much disease.

6. The building of nipa shack houses very close together should not be permitted. It is insanitary, favors crowding, and is all the more dangerous in case of fire.

7. The San Roque market should be thoroughly renovated and cleaned and a responsible market inspector and orderly employed, who should do his work under the direction of the board of health.

Many other sanitary measures, such as the issue of proper building permits, restrictions on saloons, gambling houses, expectorating in houses and about public places, and the regulation of prostitution, might be adopted with advantage, but the most important sanitary necessities have been outlined above.

In this connection I will briefly call attention to the excellent sanitary condition of Pagsanhan, a near-by Philippine town in Laguna Province. Pagsanhan is clean, its people are healthy, and its sanitary condition would indeed be a credit to almost any American city or town. Pagsanhan does not have the advantage of a near-by naval station at which its people can find employment and thereby derive a revenue of \$627,600 per annum, as do the natives of Cavite and San Roque, yet Pagsanhan is incomparably the better kept and healthier town in every respect. Of course Pagsanhan has some advantage in natural location, but location can not overcome even partially the filthy habits of a people.

It is of immense importance to every American man, woman, and child in Cavite and San Roque that these two places should be put in better sanitary condition, for some infectious disease like cholera is liable to break out at any time, and when it does, under existing conditions, we will be all but powerless to prevent its spread. A good illustration of the spread of cholera was furnished by Manila only last year. In my opinion, the sanitary condition of Cavite and San Roque is much worse than Manila. It requires no great stretch of the imagination to form a mental picture of the rapidity with which infectious diseases like cholera, plague, or yellow fever would spread through Cavite and San Roque under the present conditions.

I have to respectfully recommend that another strong effort be made to induce the municipal council of Cavite to institute as many as possible of the sanitary measures herein suggested. I further respectfully recommend that the matter be taken up with the director of the board of health of Manila and, if unsuccessful, with the governor-general of these islands.

Fleet surgeon's inspection report of sick quarters. Cavite:

November 8, 1909: These occupy the ground floor of a new building in the navy-yard, the upper story of which is fitted up for quarters for the medical officer. The sick quarters include two offices, rooms for hospital steward and apprentices, operating room, dressing room, dispensary, storeroom, laboratory, a ward containing eight beds, and detached kitchen, bath, and toilet rooms. They afford ample room, are well arranged, lighted, and ventilated, except the dressing room (used for treatment of venereal cases), which is dependent entirely upon artificial lighting and is poorly ventilated.

I found the place clean and the general sanitary condition very good. The ward is sufficiently large for transient cases, severe and long-continued cases being sent to the naval hospital at Canacao.

The present hospital force consists of one medical officer, one hospital steward, and five apprentices. The hospital corps men are fully occupied in care of ward, laboratory, dispensary, and dressing rooms, in venereal prophylaxis, and other work. One apprentice is detailed to superintend the issue of distilled water at the delivering tank, taking up about two hours each morning.

The people coming under the care of the medical officer number as follows:

Officers and their families.....	about..	85
Enlisted men (a number having families).....	do....	457
Marines.....	do....	372
Civilian employees (66 having families).....	do....	136
Native navy-yard workmen.....	do....	2,800

By the terms of a contract made with employees coming from the United States they are entitled to treatment for diseases incident to climate and in case of injury. In the absence of civilian physicians their families are also dependent upon the medical officer of the yard. He is also frequently called upon to treat cases of illness among the natives of Cavite, San Roque, and Caridad, whose combined population is about 20,000 and covers a wide area.

Recruiting duty also occupies much of the medical officer's time. For the last six months 305 men were examined for enlistment and all applicants for employment, numbering from 250 to 300 monthly, are also examined.

He has an appointment as acting assistant surgeon in the Public Health and Marine-Hospital Service, and as quarantine officer is required to board all vessels arriving at Cavite and issue bills of health and quarantine passes for baggage. Sanitary inspections and service on boards and courts also take up considerable time.

The occasional occurrence of cholera and other infectious diseases in the vicinity necessitates constant vigilance to prevent extension of diseases among the yard workmen.

Two medical officers are needed for all this work, as one should be constantly in the yard during working hours to attend to injured workmen.

The prevailing diseases among the enlisted force are malaria and dengue. The former is confined almost exclusively to the Marine Corps, the cases being recurrent and attributed by medical officers to exposure on the rifle range at Maquinaya, near Olongapo. Very few primary cases occur at Cavite. Dengue is, however, prevalent. Mosquitoes are abundant, but on account of the press of other work and an insufficient force no active measures toward extermination have been undertaken by medical officers. The detail of a second medical officer to this yard will permit a determined effort at mosquito extermination and, it is believed, cause a consequent reduction in the large number of dengue cases.

Subsequent reports by the senior medical officer stated—

The general sanitary condition of the station for the past year has been good. All buildings, with the drainage and sewerage for the same, are in good condition.

The recommendation of my predecessor is again made for the establishment of a steam laundry capable of handling the laundry of the entire yard. A beginning has been made, but the present facilities are such that it is not possible to handle the laundry of the entire yard.

An ice plant and cold storage should be installed. This would be a great boon for all concerned and would free the navy from its obligation to the army for supplies of meats and to Manila contractors for ice. Owing to the lack of an ice plant and cold storage, the station is frequently during typhoon season without fresh meat or ice.

An excellent lunch room has recently been established at the men's reading rooms, where men on liberty can now be served with clean, well-cooked meals at reasonable prices.

Upon the recommendation of the surgeon of the yard a petroleum squad was established in December, 1909, and placed under the supervision of the assistant surgeon. Numerous breeding places for mosquitoes were petiolized and it is hoped that in time the number of mosquitoes on this station will be appreciably reduced.

It is strongly recommended that if this station be retained as a navy-yard quarters be erected for all officers attached to the station, as at present the condition under which most of the officers have to live with their families is most insanitary. All the houses in Cavite are of the old Spanish type, entirely without modern sanitary arrangements, and filled with the accumulated filth of years, making it impossible to clean them properly. Some of these houses have been fitted with makeshift sanitary plumbing at the expense of the officers living in them.

The diseases prevalent on this station for the year are principally dengue, bronchitis, and kindred complaints. There were some cases of malaria during the year, but in no case was the infection traced to this station. There were seven cases of dysentery during the year, all of which recovered and returned to duty.

During the year there were no cases of cholera in Cavite and but five cases in San Roque. These cases were sporadic and the prompt measures taken by the health authorities checked any epidemic tendency. There were 284 cases of cholera in Manila and 255 deaths during the past year. This is a marked reduction, there being over 1,200 cases with over 800 deaths, during the year 1908.

The general health of the station for the month of March has been good. There were two cases of dengue. On February 2, 1910, a private marine reported at this office suffering with cholera. An immediate inspection of the marine personnel was made and three other cases discovered suffering from cholera or "cholerae." These men were immediately transferred to the hospital, prompt sanitary measures were immediately taken, and there were no further cases. The infection in the first case was traced to Caridad, and a quarantine was instituted against Cavite Viejo, Caridad, and San Roque until Cavite Viejo was officially declared free from cholera, when the quarantine was lifted. All of these cases, fortunately, recovered. At present there is no cholera either in Cavite Viejo, Caridad, or San Roque, and the number of cases in Manila is markedly decreased.

The vaccination of the enlisted personnel of the station was completed during the month. There were 71 per cent of "takes," showing the necessity of careful supervision of the enlisted men as regards vaccination.

Olongapo, P. I.—Attention is invited to the fact that one of the most prolific breeding places for mosquitoes is in the water contained in the bamboo used as fencing material throughout Olongapo. Mosquito breeding in these bamboo cylinders can be prevented if instead of cutting off the stem just below the joint, the line of incision be raised a little. But cutting just above this joint, due to the fact that a diaphragm bridges the cavity at each joint, the cup-like space which is about 8 inches deep, will no longer exist, and mosquito breeding will be prevented to this extent. A visit to Olongapo and investigation of this matter will show that myriads of mosquitoes are breeding in the water contained in the hollow bamboo used for fencing material. Puncture of the bamboo at a low spot in the water container will prevent the accumulation of water and consequently the breeding of many mosquitoes.

Fleet surgeon's inspection report, October 15, 1909: As the town of Olongapo is included in the naval reservation, is the home of most of the native employees, and has an intimate health relation with the yard proper, it may be considered proper to include it in this report.

A notable improvement in its general appearance and condition was at once evident. The large number of dogs and pigs formerly straying about were absent. The streets and yards are clean, surface drainage by trenches on either side of the streets is being maintained, garbage is collected and carted away, latrines formerly in close proximity to dwellings have been removed and placed out over the bay, and the meat dealers in the market, which is frequently inspected, are required to keep meats and other food covered by screens. The bamboo fences surrounding the nipa shacks are being sawed off at the joints, so as to remove receptacles for water, reducing the number of breeding places for mosquitoes. The senior medical officer of the yard has secured the appointment of "presidente de sanidad" of the municipal health board, which has been organized in accordance with the regulations of the Philippine Commission, and also has the appointment of acting assistant surgeon in the United States Public Health and Marine-Hospital Corps, all of which allows him to exercise supervision and gives him great power in the enforcement of sanitary measures, and, as he signs all death certificates, enables him to keep in touch with health conditions.

Prostitutes, of whom there is a considerable number, have been more or less segregated, are frequently inspected, and are under police control. A station for prophylactic treatment after venereal exposure has been established outside of the yard gate, under the constant charge of a hospital apprentice.

The general health of the town is good, the prevailing diseases being of malarial origin, which, it is hoped, can in time be greatly reduced by still further measures toward mosquito extermination and general sanitary education of the natives.

The source of the water supply consists mainly of wells, placed dangerously near the houses, which can, however, gradually be filled in after extending the supply from the yard by additional piping. The yard water is at present carried to a portion of the town, but the number of hydrants is not yet sufficient, while they are too remote to supply the entire town. It would also be well, when funds are available, and if the nature of the locality permits, to consider some other method of sewage disposal, since the placing of latrines over the bay may in time become objectionable and a source of danger. In fact, it is now claimed that some of the sewage is carried along the yard front.

A considerable area of the yard was formerly low, marshy, and covered by undergrowth. This is being filled in by mud pumped from the inner harbor bottom, the general surface raised about 3 feet and graded, and the undergrowth removed. This will be an important factor in eliminating the breeding places for mosquitoes, and will also extend the available surface area.

The water supply brought from springs some distance away is very good, and the existence of an ice plant and steam laundry (the latter for officers and their families) goes far toward prevention of disease. One of the common forms of skin disease among the marines is "dhohe itch," which could be eliminated by the installation of a steam laundry for their use, especially as it appears that the profit accruing from the post exchange is in itself nearly sufficient for its maintenance.

Except for the existence of malaria and dengue, the general health in the yard has been very good. The number of cases of these two diseases have, however, been so great that Olongapo [in this connection see page 82] bids fair to rival in this particular the Isthmus of Panama, even before the latter was placed under sanitary control. And what has been done in the latter place can equally be done in the former. It is now positively known that malarial diseases are propagated by mosquitoes, and there is almost a certainty that the propagation of dengue is due to the same insect. The raising of the yard level and removal of breeding places will go far toward eliminating this pest; but much can be done by screening buildings with wire nettings; this applies especially to the marine barracks, where about 1,100 men are quartered at present and who are the principal sufferers from these diseases. As flies are also carriers of infection, screening of the kitchens and mess halls is especially important. Officers' quarters, sick quarters, in fact, all buildings should be screened.

The principal source of malarial infection of marines has been the rifle range at Maquinaya, about 3 miles distant from Olongapo. In order to be on the spot at the most suitable time of the day (morning and late afternoon), men have been kept on the range over night, sleeping in tents. Malaria and the anopheles mosquito are especially prevalent in this locality. It has frequently been recommended that this site be abandoned or that properly screened buildings be erected to house the men. The latter measure, I understand, is finally under way, and should be pushed to completion without further delay.

Referring again to the presence of sewage along the yard front, this may be due to the fact that the sewer pipes from the yard do not extend sufficiently far into the bay for the sewage to be carried away by tidal currents. As there is a good bathing beach here, this subject is worthy of thorough investigation.

The sick quarters is a wooden frame building, divided into office, operating room, dispensary, storeroom, mess hall, laboratory, rooms for hospital force, bath and toilet rooms, and a ward capable of containing 18 beds, all under one roof, and divided by partitions containing cracks, some of them not extending entirely to the top; owing to the devastation by the white ant, it frequently requires repair; it is of primitive design and at the best only a makeshift. The outer walls are open near the top, admitting air freely, and is an advantage during the dry season, but during a typhoon, owing to this fact, cracks in the wall and a leaking roof, beds frequently have to be moved to the center of the ward to keep patients dry. I found the building as clean as it is possible to make one of this description and having rough, uneven floors containing cracks and holes. Although a room is set apart for operative purposes, the danger of infection in abdominal operations would be great under the present environment.

Since the hospital ship *Relief* has been stationed here, all serious medical and operative cases have been transferred to her, but in the event of the *Relief* being no longer available, the station would be seriously handicapped by the lack of a properly constructed, modern hospital. Canacao is too remote and the means of communication under certain weather conditions too uncertain to make it available for emergency cases. I found the instruments and appliances in good condition and the records properly kept.

In this connection it may not be amiss to refer to the duties of the medical force stationed at this yard. It comprises two medical officers, one hospital steward, and seven hospital apprentices. The population coming under the care of the medical officers is made up of the following:

Officers and their families.....	about..	50
Marines.....	do....	1,100
Employees (when injured).....	do....	1,300
U. S. S. <i>Mohican</i> (personnel).....	do....	150
Crews of auxiliary vessels.....	do....	150

In addition, the population of Olongapo is about 4,400, and the place being without a civilian physician, the medical officers are frequently called upon in emergency cases (and even to Subic), to which in the interests of humanity they can not well decline to respond.

In addition comes the examination of recruits for the navy, insular force, constabulary, reenlistments, drilling and inspection of the hospital force, and duty on courts and boards. As already stated, the senior medical officer acts as chief sanitary officer of the station, which necessitates frequent inspection and constant vigilance to prevent epidemic disease.

The marine force frequently engages in "hikes" into the interior, sometimes of a week's duration, and they should, while away, and while on the range at Maquinaya, be accompanied by a medical officer. Too, the frequency of parasitic and other diseases incident to the Tropics affords an excellent field for the study of these diseases and dissemination of knowledge regarding them to the profession at large.

The sick bay of the *Mohican* has recently been moved from the berth to the gun deck, and affords ample, well-ventilated, and well-lighted space for treatment of injuries occurring in this part of the yard. The medical department is under the charge of the junior medical officer of the yard, with two hospital stewards. One of the stewards might, with advantage, be transferred to the yard and replaced by an apprentice. The sick, if the cases are apt to continue on the list for longer than a day or two, are transferred to the *Relief*. I found the sick bay clean and sanitary, and the instruments and outfit generally in good condition.

Guam, Mariana Islands.—The general conditions on the island are very good, and while the sanitary conditions are not the best, there is a steady and well-marked improvement each year.

Towns inhabited by natives of the character of the inhabitants of this island are rarely found in as clean and generally satisfactory sanitary condition as are the towns of Guam. This is the universal comment of the medical officers.

In the next year a good water supply will be installed for the town of Agaña, and a well-marked change is to be expected after its completion. The source of supply is good, and there should be a material reduction in the incidence of amoebic disease and, it is hoped, of the worm infections, which now contribute very largely to the death rate, either directly or by rendering the patients more susceptible to other infections.

It is impossible to determine even approximately the percentage of natives infected by hook worm, but it is very high, especially among the children, many of whom must have been infected by mouth.

With the introduction of the new water supply it is hoped that all the wells in town will be done away with and one of the greater sources of infection eliminated. Much of the laundry work is now done in the Agaña River, a small stream running through the town, and many cases of skin infection must come from the use of this water. In a great measure the new water supply will do away with the necessity for using the river water.

The question of disposing of garbage and sewage has always been one of unsatisfactory solution. A rock-pile incinerator is now being finished, and if it proves satisfactory in its operation, as it is hoped it will, the question of disposing of the garbage of Agaña will be settled. One or two others may be constructed in the larger towns, but little can be done in the smaller towns, as there will not be refuse enough to keep the incinerator going.

Of the diseases of the island tuberculosis is prevalent and increasing, due no doubt to two factors, the lowered resistance resulting from bowel infection and the custom of closing the houses as tightly at night as the construction will permit, with, of course, the carelessness of disposal of sputum, which is to be expected of the people of the order of intelligence of these natives. There is no more possible solution for this problem than an educational campaign, which has been started and will be carried out vigorously, with the hope that in time good results will follow. The proper mode of living is being pointed out continually by all the medical officers here, and an effort is made to impress the natives as much as possible with the seriousness of the condition.

Leprosy is apparently not increasing. Twenty-four cases are now segregated, and with the possible exception of one there is no doubt of the disease. The doubt in this case will be cleared up shortly when suitable apparatus for the blood examination arrives. Assistant Surgeon Crow has done excellent work in demonstrating the presence of lepra bacilli in the blood by the sedimentation method employed by Rosenberger in tuberculosis (Naval Medical Bulletin, April, 1910). The results have been so confirmatory that no cases will be segregated in the future without the demonstration of the bacillus in the blood. By making use of this method it is undoubtedly possible to make a much earlier positive diagnosis than has heretofore been possible.

The question of the advisability of recommending the transfer of the lepers from this island to either the colony in the Philippines or the Hawaiian Islands is under consideration, and it is believed that by doing this it will be possible to free the island of leprosy in a short time. Nothing beneficial in the way of treatment has been discovered. From the appropriation "Buildings for lepers, island of Guam," of \$15,000 for the fiscal year 1909, maintenance, repairs, new building for insane, etc., amounted to \$9,750.18.

Gangosa is very common, although I believe that two and possibly three conditions are being treated under this head. Some cases of inherited or untreated syphilis, others of tropical ulcer, and the third condition where the destruction of the tissues of the face or true gangosa exists, have all been grouped under one head.

Many of these cases yield quite promptly to appropriate treatment, and it is regretted that the colony was placed so far from Agaña as to make it impossible to carry out the treatment as it should be done. It has been recommended that a ward be built on the hospital grounds for the treatment of gangosa of women and children, the funds for the construction to come from the appropriation made by Congress for the care of the lepers and other special cases of the island. A good-sized ward would be adequate for women and children, and I hope that in another year a similar ward can be constructed for the men. The efficiency of thorough treatment properly carried out has been demonstrated on some of the bad cases by bringing them in and treating them in a small building attached to the Maria Schroeder Hospital. The results are so encouraging that one could almost see the end of the gangosa colony if the funds were available to build suitable hospitals where the cases could be treated by the medical officers. Ten thousand dollars would be sufficient for the two buildings. In this disease again it is necessary to educate the native to the point of reporting for treatment before the destruction has been so great that he will be terribly disfigured for life. The field for plastic surgery is enormous, as there are many most unsightly cases on the island that can be greatly benefited by surgical treatment, but unfortunately we have not now the hospital space to devote to the patients. There is ample land already donated to the Government to put up the buildings, and the only money needed will be for the buildings. Food, clothing, and dressings are provided by the special appropriations made each year by Congress.

Guha, or epidemic asthma, has not been so prevalent during the year, and only 16 deaths have been reported from this disease.

From a professional standpoint this is one of the most interesting stations in the Tropics; the amount of work that can be done is almost unlimited, but at present the facilities do not permit of its being undertaken. Over 30,000 visits and calls have been made during the year. Complete equipment for the laboratory and hospital is needed if the work is to be done as it should be and the proper study of the disease conditions carried out.

A training school for native nurses has been started in a modest way in connection with the Susana Hospital, and it is hoped that in time the women who have been through the course of instruction will take up the practice of midwifery. The present midwives are a most incompetent lot, age and ignorance being apparently the requirements. If the new plan succeeds, the licenses of the old midwives will be revoked as soon as an adequate number of the trained women are available.

An account of the hospitals in Guam and the establishment of the new naval hospital will be found in the section headed "Hospitals."

The vital statistics for the year are as follows:

Total population (all native except about 400).....	11, 899
Births (females, 251)	543
Deaths	283
Increase in population since 1900.....	2, 084
Increase for fiscal year 1909.....	270
Deaths per 1,000 for 1905.....	27. 8
Deaths per 1,000 for 1906.....	28. 2
Deaths per 1,000 for 1907.....	24. 3
Deaths per 1,000 for 1908.....	21. 4
Deaths per 1,000 for 1909.....	23. 8

Cause of death.

Abscess.....	1	Nephritis.....	7
Anemia.....	4	Oedema.....	2
Appendicitis.....	1	Paralysis.....	1
Carcinoma.....	4	Patulous foramen ovale.....	4
Cellulitis.....	1	Peritonitis.....	1
Cerebral hemorrhage.....	1	Poisoning (accidental).....	1
Childbirth.....	3	Premature birth.....	2
Convulsions.....	2	Pulmonary congestion.....	1
Drowning.....	1	Pyo-thorax.....	1
Dysentery.....	16	Ruptured uterus.....	1
Epidemic asthma.....	16	Senile debility.....	9
Fracture of spine.....	1	Stillbirths.....	9
Gangosa.....	3	Stomatitis.....	1
Gastro-enteritis and colitis.....	35	Suicide (hanging).....	1
Hook-worm anemia.....	1	Tetanus.....	2
Inanition.....	16	Tetanus neonatorum.....	7
Leprosy.....	3	Tuberculosis of the lungs.....	41
Liver abscess.....	1	Tuberculosis of other parts.....	6
Meningitis.....	4	Ulcerative colitis.....	5
Diagnosis uncertain.....	67		

Extracts from governor's report, June 30, 1910.—The four medical officers detailed for duty at this station have most zealously and efficiently ministered to the needs of the population and supervised the sanitary conditions of the town of Agafia and the outlying villages.

The natives have a peculiar dread of hospital treatment, although presenting themselves freely at the daily clinics, and it requires much tact and skill on part of the surgeons to overcome their reluctance to submit to necessary operations.

Many cases of disease which now result fatally could, it is believed, be cured did the patients present themselves in its earlier stages.

The health of the islanders for the year has been, on the whole, very good. No epidemic diseases have occurred other than a mild epidemic of gastro-enteritis that prevailed during the earlier part of the year and which, in part, may be attributed to malnutrition, due to a shortage of the rice and maize crops and the consequent use of the dadang or federico nut for food by the poorer classes.

The sanitary condition of the island for the year has improved materially. Habits and customs of generations do not easily yield, but a rigorous enforcement of the sanitary regulations by the authorities is gradually bringing about an improvement in all villages.

Renewed efforts were made during this year to detect and segregate all cases of leprosy in the island. Besides the inspections by the medical officers at Agafia and on their visits to the outlying villages, orders were sent to the several commissioners of these villages and to the hospital apprentices at the dressing stations to report and send to Agafia for examination all suspected cases, both of leprosy and of gangosa, and it is believed that all the existing cases, at least of leprosy, have been brought to light.

Frequent repetitions of these methods will be necessary to detect such new cases as may arise as the natives are much inclined to belittle the disease and to conceal the patients.

Under the head of "Special patients," to whom, equally with the lepers, the annual appropriation applies, are included those afflicted with the equally dreadful disease, gangosa, to the study of which the medical officers have devoted much time and care. As a result 22 cases originally diagnosed as leprosy have been found to be gangosa and segregated as such in Ypao. It has been found possible to release, provisionally, 35 cases of gangosa, of whom 14 had been originally segregated under the diagnosis of leprosy; each was given written instructions as to treatment to be followed and directed to report for examination on fixed dates. The results have been most satisfactory, and only one case had to be returned to the colony. It is believed by the medical authorities that the disease is becoming less prevalent.

Improvements for the comfort and more rigorous segregation of these unfortunates have been made as required, and a large phonograph, records, pictures, and other articles for their entertainment have been furnished from funds raised by the charitably inclined members of the naval colony and residents of Agafia. A small house for the detention of insane patients, of whom there are several violent cases in the island, has been built on the borders of the segregation colony.

Tutuila, Samoa.—The health of the command has been excellent, 2.46 per cent sick for the year against 2.97 per cent last year; but nearly all of the crew of the station ship show the effects of tropical climate, and the recommendation is reiterated that

the station ship make a visit of at least one month each year to either New Zealand or Australia.

In December, 1907, the medical officer recommended that mosquito nets be supplied all of the naval personnel sleeping in quarters not thoroughly screened, and requisition was made by the equipment officer in January, 1908, for 72 nets. After repeated recommendations on the subject by the medical officer and reiterated requisitions by the equipment officer the nets were at last received in March, 1909, and put in use April 1, 1909.

The advisability of this measure is already shown by the fact that during the fourth quarter of 1908 there were 6 admissions for lymphangitis, for the first quarter of 1909, 3 admissions, for the second quarter, 5, and for the third and fourth quarters, none, the first quarters for many years in which there have been no admissions for this disease.

We are informed that the machinery for an electric-lighting plant for the station is about to be shipped. This will be an important item in the health and comfort of the station, and upon its installation offers the opportunity to equip the hospital with an X-ray apparatus.

The water supply of the station is good but often inadequate, and so situated that eternal vigilance is required to prevent its contamination. A source of supply advocated by the captain of the yard in his annual report, June 30, 1909, could be made available at small cost, would be ample for all needs, and practically beyond chance of contamination.

The establishment of a board of health, which is dealt with more fully in the special report on uncinariasis (published in Naval Medical Bulletin), is an important advance in the sanitation of the island. About 50 per cent of the natives were found in December, 1909, to be infected with "hookworm," and 25 per cent of the native "fita-fita" guard. The text of the governor's proclamation, "An act to preserve the public health," dated February 19, 1910, follows:

"Be it enacted by the Governor of Tutuila, as follows:

- "1. The short title of this regulation shall be 'The Public Health Regulation, 1910.'
- "2. A board of health is hereby constituted to be appointed by the governor, and to consist of three members, one of whom shall be the senior medical officer of the United States naval station, Tutuila, Samoa.
- "3. Said board of health is hereby empowered and directed to make and publish health regulations, subject to the approval of the governor, to apply to every part of said colony, or to any part or parts of said colony that the said board of health may direct.
- "4. Said board of health is hereby empowered and directed to make such orders as may properly be, in the discretion of said board of health, within the purview of any municipal or state board of health in the United States; said orders to prescribe the number of days wherein any such order shall be complied with: *Provided, however*, That no extension of any period by said board of health shall in any way operate as a nullification of any such order. All orders of the board of health must be approved by the governor.

"5. Each village and the owner and occupier of each foreign house shall provide one or more latrines of suitable character and design, and the officials of each village and the owners and occupiers of each foreign house shall be required to provide and maintain such latrine or latrines in a clean and sanitary condition.

"6. The defecation by any person in any place other than a properly constructed latrine, is and shall be considered a breach of this regulation.

"7. Upon conviction before the court of any violation of this regulation, or of any violation of any health regulation or of disobedience to any lawful order of said board of health, the offender shall be sentenced to pay a fine of not less than five dollars and not to exceed one hundred dollars, or by imprisonment in the jail with or without hard labor, in the discretion of the court, for a period of not less than ten days and not to exceed six months, or both fine and imprisonment in the discretion of the court."

In April last one of the herd of steers imported from Auckland, New Zealand, by the purchasing pay officer, was found to be infected with tuberculosis. A rigid examination of the entire herd was made, which resulted in the ultimate condemnation of six steers on account of pulmonary or visceral tuberculosis.

In this connection I would also earnestly recommend the prompt and total suppression of the dispensing of medicines to the natives by unauthorized persons.

The chief offenders in this respect are certain missionaries, with no medical education and insufficient knowledge, and who attempt to treat all manner of cases and to administer the most powerful and dangerous of drugs, of which, I have found upon investigation, they have not the slightest knowledge of the therapeutic action or dosage.

Whatever it may have been in the past, the necessity for the dispensing of medicines to the natives by the missionaries does not exist at present, for within a few miles

at most of where they receive medicines from a missionary for which they must pay, they can consult a qualified medical practitioner detailed by the Government and authorized to dispense medicines free of charge.

On February 9, 1910, the governor issued a proclamation prohibiting the importation and sale of opium or any preparation containing the drug in the United States naval station, Tutuila.

It is recommended that a small number of native women from various parts of Tutuila and Manua—two to four at first—be designated as probationary midwives, that they be given a ration or small salary by the insular government, and kept under instruction at the hospital until such time as the medical officer may judge them fit to be licensed to practice as midwives.

It is hoped in this way to disseminate the rudiments of aseptic midwifery among the natives and in some measure to decrease the present high percentage of infections following deliveries by a horde of old women who do not hesitate to thrust a filthy hand even into the uterine cavity.

It is also recommended that a small number of native men be designated as students under similar conditions and kept under instruction at the hospital for two or three years or until such time as the medical officer may deem them qualified to return to the outlying districts to practice medicine to a limited degree under the supervision of the medical officer. This plan has been followed in Fiji and found satisfactory.

It is believed that qualified midwives and limited practitioners of this class in the outlying districts could be made useful to the medical officer in the sanitation of the island, in discouraging devil doctoring, in dressing minor surgical cases, and in persuading the more seriously ill to come to the hospital for treatment.

NAVAL ACADEMY AND MIDSHIPMEN.

Table 19 shows the admission rate for all causes and for contagious, skin, general digestive, respiratory, genito-urinary, eye, and heart diseases, as well as for neurasthenia, to be much higher for midshipmen than for the service at large, or for any other groups except apprentice seamen. This does not indicate that they are necessarily so much more subject to all of these classes of affections, but that they are under closer supervision and are more apt to report for early treatment than are other groups of the naval personnel. Skin diseases seem to have been largely of a parasitic nature, and may have relation to the use of the swimming tank, in which the water has been reported as not being changed sufficiently often. The undue prevalence of diseases of the digestive organs is believed to be due to the ingestion of food frequently received from sources outside the mess hall, and in a considerable measure to athletic exercise too soon after meals. The medical officer in charge of physical training has recently revised the dietary of the training table, which usually applies to about 100 midshipmen, with view to a considerable reduction in protein.

The investigation of bony development by the Rotch system of radiographic study of relative ossification of the bones of the wrist has been continued to practical completion, but the conclusions have not yet been made nor results published.

The following table gives the average strength, weight, height, and age for each class for 1910:

Class.	Number of midshipmen.	Average strength.	Average weight.	Average height.	Average age.
		<i>Pounds.</i>	<i>Pounds.</i>	<i>Inches.</i>	<i>Yrs. Mos.</i>
1910.....	133	6,346	146.2	68.3	22 4
1911.....	201	6,395	146.1	68.2	21 3
1912.....	190	6,397	146.3	68.1	20 6
1913.....	191	6,099	144.1	68.2	19 4
All midshipmen.....	715	6,309	146.6	68.2	20 1/2

Extracts from annual sanitary report:

Two deaths occurred away from the academy, one from appendicitis and one from typhoid fever.

The professional services of the medical officers on duty at this station are only in part exhibited by the statistical returns, which relate only to officers, midshipmen, and enlisted force at this station. There is an increasing number of families of officers at sea, on the retired list, of enlisted men at sea or attached to this station, a number of retired officers and men resident in the city of Annapolis who avail themselves freely of the medical supplies and professional services, requiring almost the entire services of one medical officer. The enlisted men serving on the ships attached to the station are allowed to live ashore and must when sick be attended prior to transfer to hospital.

In addition to calls for professional attention from civil employees, workmen about the grounds, servants in officers' families, and the families resident at the academy make up a sum of service which involves considerable labor and the expenditure of much time in making professional visits to both patients within the academy grounds and those residing in the city of Annapolis. When it is considered that the distance covered in a single visit may be from 2 to 4 miles and that there is no conveyance for this purpose, it will readily be seen that much time and energy is wasted en route and the number of calls necessarily limited. A suitable conveyance would relieve much strain and favor a more efficient discharge of official obligations now placed upon the medical officers by the regulations.

The following memoranda give an approximate idea of the number of persons requiring medical aid and entitled to the same:

Midshipmen.....	775	Tailor shop and store.....	15
Ships.....	466	General store.....	20
Marines.....	240	Masters at arms.....	8
Officers, instructors, etc.....	186	Members of families of officers on	
Officers on retired list.....	26	active list.....about..	930
Buildings and grounds.....	320	Members of families of officers on	
Mess hall.....	117	retired list.....about..	130
Laundry.....	40		
Experimental station.....	23	Total.....	3,322
Marine engineering.....	26		

Attendance upon the above, exclusive of midshipmen and enlisted men within the station proper, occasioned during 1909 2,804 visits, 2,305 office consultations, 12 confinements, 22 gynæcological and 11 surgical operations. The total number of original prescriptions compounded was 3,249.

The food, ventilation, clothing, and bathing facilities, and all hygienic matters relating to the midshipmen are excellent, and every possible effort is daily being made to keep them up to a high standard.

For some time there has been much anxiety as to the cause of so much eye trouble among the midshipmen. So much attention had been given to this condition that in May, 1909, Medical Inspector Gatewood was ordered to make a special report and examination especially bearing upon the question of artificial illumination of the study rooms at the Naval Academy and to recommend such changes as to reduce to a minimum such eye strain as may have been incident to faults in the present system of lighting. In his report to the Secretary of the Navy the estimated cost of \$10,000 was submitted as necessary to overcome the dangers and inconvenience of the present lighting system. This sum was not appropriated, and the conditions remain as stated in his report, with the exception that a slight attempt has been made with the means at hand to relieve a very small part of the eye strain by painting the tops of the tables a dull light green. This, I believe, has been a decided improvement from the reflection from the formerly polished surface.

Subsequent to the date of this report and following exhaustive research and recommendations made by Civil Engineer Parsons and Passed Assistant Surgeon H. W. Smith, the work of retinting the study rooms (pale green) and supplying tungsten lamps with stalac-tite globes has been undertaken and should be completed before the next school year begins.

Results of examinations for manifest error of refraction preliminary to sending patients to service specialist for the year ending December 31, 1909.

Disease or refractive error.	Midshipmen.				Officers, enlisted men, and their families.	Total.
	First class.	Second class.	Third class.	Fourth class.		
Myopia.....		3	4	2		9
Hyperopia.....	8	2	5	11		26
Myopic astigmatism.....	1	4	7	4		16
Hyperopic astigmatism.....	13	16	11	10		50
Compound myopic astigmatism.....	1	2	6	2	1	13
Compound hyperopic astigmatism.....	1	2	3	3		9
Pterygium.....	1		1		1	3
Asthenopia.....	5	1	2	5		13
Conjunctivitis.....						1
Retinitis.....			1			1
Total.....	30	30	41	37	2	140

Aside from the above, the following complete examinations were made under cycloplegic, and glasses ordered:

Disease or refractive error.	Midshipmen.				Officers, enlisted men, and their families.	Total.
	First class.	Second class.	Third class.	Fourth class.		
Myopia.....	7	2	1		2	12
Hyperopia.....	3	3	4	3	15	28
Myopic astigmatism.....			6	1	1	8
Hyperopic astigmatism.....	1	8	5	11	7	32
Compound myopic astigmatism.....		6	7	3	6	22
Compound hyperopic astigmatism.....	3	5	10	17	43	78
Mixed astigmatism.....	1	1	2		3	7
Presbyopia.....					12	12
Emmetropia.....	1				1	2
Asthenopia.....					1	1
Anisometropia.....				1		1
Total.....	16	25	35	37	90	203

On one of the ships (*Olympia*) of the summer practice squadron the medical officer observed:

In several instances it was determined that individuals known to be nearsighted could not read signals without the aid of glasses at the usual cruising distance of the next ship astern (400 yards).

It is recommended that instead of the present dispensary a separate building, planned for the purpose, be constructed at this station, similar in design to such dispensaries at other navy-yards.

The location of this building should be more central than the present dispensary, preferably near Maryland avenue, and thus convenient for the families who live at each end of the yard, as well as for those who have quarters in town.

Many more house visits are now made, owing to the inaccessibility of the dispensary and other discomforts attendant upon an office visit.

There is no proper waiting or examining room, and the offices for the surgeons and staff are damp, gloomy, and unsuitable for the purpose.

The driveway beneath the colonnade, where the present dispensary is situated, is open to carriages, bicycles, and automobiles, thus being dangerous at all times for children and adults.

A suitable building would facilitate the increasing work of the medical department. It should provide an office and waiting room for the senior medical officer; an office and examining room for the surgeon detailed as "officer of the day," or attendant upon families; a well-equipped dispensary and an office for the pharmacist and clerical staff adjacent to the senior medical officer's office, besides large storerooms, closets, etc. If constructed with a second story, it would provide quarters for the pharmacist,

or stewards, and thus make it possible to have prescriptions filled at all times without sending to the midshipmen's sick quarters, which is now necessary between 5 p. m. and 8.30 a. m.

MARINE HEADQUARTERS AND DETACHMENTS.

The movement of disease and development of physical defects in the Marine Corps have been generally discussed in previous chapters and in extracts from sanitary reports from foreign stations. Aside from the work recorded with marines at Camp Elliott, Canal Zone, and in the Philippines, the only expeditionary work in which they were subject to special medical observation was on the transports which conveyed two detachments and held them in readiness for service in Central America in December, 1909; the regiments were landed only in the Canal Zone and health conditions were excellent.

As already stated, an unduly large number of medical surveys has been held upon recruits in this corps, due chiefly to the inexperience or unreliability of civilian physicians conducting examinations at recruiting stations.

The senior medical officer at the marine barracks, Washington, D. C., stated:

In this connection I beg to invite attention to the very large number of boys who are accepted at recruiting stations with hypertrophied tonsils, and those of no moderate degree, but in many cases excessive. Of all persons accepted as duly qualified physically for the United States Marine Corps, those who are to learn to play the bugle should be equipped with the best breathing apparatus that nature can supply. I firmly believe that where these enlarged organs are present, generally associated with adenoids, they must and frequently do interfere directly with the proper proficiency on that instrument. Many are the instances where the pupils tell me their throats hurt them after practice, and inspection reveals the cause. This is aside from the fact that hypertrophied tonsils are efficient catch basins for all morbid germs, for all varieties of irritating dust and floating particles, ever ready to excite an attack of acute follicular tonsillitis, which may not be limited to the patient, but may spread to his companions. Hypertrophied tonsils should be an absolute disqualification for all apprentices to learn music. I have not rejected for this cause those already passed at other recruiting stations, as I have found them generally willing to submit to operative relief, but this does not alter the question.

The total number of reexaminations for 1909 was 69; of these 23 (33 per cent) were rejected for the following reasons, subsequently surveyed, and finally discharged as unfit:

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Deformity, hammer toes both feet. 2. Overlapping little toes both feet. 3. Flat feet. 4. Flat feet, corns, weakness right ankle. 5. Flat feet, ingrowing toe nails, both great toes. 6. Flat feet, unable to march. 7. Hammer toes, corns. 8. Corns, hammer toes, callous patches, flat feet, ingrown toe nails. 9. Hammer toes, corns, slight flat feet. 10. Flat feet. 11. Instability of nervous system, asthma, and bronchial catarrh. 12. Defective vision, right eye 12/20, left eye 15/20, hammer toes both feet, bunions both feet, history of chronic dysentery. | <ol style="list-style-type: none"> 13. Flat foot, right, extreme degree, result of old injury. 14. Corns, hammer toes, callous patches both feet. 15. Extreme nervous instability, not duty, excessive use of alcohol and tobacco. 16. Callosities soles feet; beginning bunion left foot, overlapping toe left foot. 17. Extreme degree of flat feet. 18. Extreme degree of flat feet. 19. Bunions both feet. 20. Hammer toes and corns. 21. Extreme flat feet. 22. Deafness right ear almost complete. 23. Stiff knee, result of old injury. |
|---|---|

Save in one instance, they were originally examined by civilian doctors, employed at the various recruiting stations throughout the country, and sent here for verification and subsequent duty. With hardly an exception, all this unfitness for the service should have been detected at the first inquisition and the candidate rejected forthwith. The great expense of sending these persons here and returning them to their places of

enlistment, added to the charge of maintenance, partial outfit and pay, until the surveys were made and approved, would thereby have been avoided. The disqualifications were of such a nature and so marked that in no case was the recommendation for discharge from the service disapproved by the bureau.

Eighteen of these were rejected for extreme deformities and disabilities of the feet. Armies of the present day march more on their feet and less on their bellies, owing to the improved commissariat, and these must be sound and capable of carrying individuals and their accouterments without giving way, even under strenuous conditions. Straggling from bad feet will often deplete the ranks. This fact may not be sufficiently realized by the average civilian examiner, his investigations may be too superficial, his better judgment may be overshadowed or unduly or unwisely influenced by the statement of the applicant, who in his eagerness to enter the service is not apt to lay stress on his points of least resistance, but on the contrary is inclined to undervalue or to conceal them.

The experience at Philadelphia was much the same, although the percentage finally rejected was much lower.

Recruits reexamined on arrival from recruiting stations number 545, and of these 47 were rejected for defects as follows:

Defective vision.....	10	Ozaena.....	1
Heart disease.....	5	Spinal curvature.....	1
Deafness.....	3	Obesity.....	1
Chronic ear disease.....	3	Dementia.....	1
Tuberculosis.....	3	Deformed skull.....	1
Underweight.....	3	Poor chest development.....	1
Color blindness.....	3	Chronic periostitis.....	1
Flat feet.....	2	Poor physique.....	1
Rupture.....	2	Varicose veins.....	1
Defective teeth.....	2	Deformed right index finger.....	1
Secondary syphilis.....	1		

It is believed that the civilian examiners who have passed these recruits are not sufficiently impressed with the necessity of giving all parts of the examination their personal attention and particularly testing most carefully the applicant's vision.

The statement made by some recruits that their eyes were not examined or were examined only by an enlisted man is in some cases so fully confirmed by ophthalmoscopic examination that it must be accepted.

Report on marine barracks at Annapolis, Md.:

During the year the sanitary condition of the barracks has been very good. At all inspections the entire barracks have always been found very clean and the sanitary condition satisfactory. Although a comparatively new building, there is no system of ventilation other than the doors and windows, but as the windows are many and well arranged for this purpose, good ventilation can be secured, providing the window sash is properly adjusted; however, this is often neglected, and in consequence the air in some rooms remains practically unchanged during the entire night. This condition, in the opinion of the medical officer, is directly responsible for many of the colds now prevalent among the men.

The guardroom, which is occupied by members of the guard during their tour of duty, contains about 5,376 cubic feet of air space. The average guard consists of from 18 to 21 men. As two-thirds of this number are in the room at all times, both day and night, it will readily be seen that the air space per man is much less than that required. This room differs from the others in that it has windows at one side and one end only. With these it would be impossible to have ideal ventilation, but fairly good ventilation could be secured without creating a draft if the sash in each window were properly lowered; this is never done, and the air in the room is often noticeably bad.

The cleanliness in the mess hall and kitchen deserves especial mention. The food served is of a uniformly good grade and well prepared. Men suffering from venereal or other infectious diseases eat at a table set aside for this purpose, and the dishes and other utensils used are boiled after each meal.

The gymnasium, which is located on the third floor, is well equipped and accessible to all the men at the post. There are mats, horizontal and parallel bars, traveling and swinging rings, Indian clubs, dumb-bells, wands, chest weights, medicine balls, a rowing machine, and punching bag. Instruction in the use of these is given by a competent noncommissioned officer. A certain amount of gymnasium work is compulsory.

The main toilet located in the basement is well ventilated and the continual use of disinfectants makes the sanitary conditions excellent. Separate bath tubs and wash bowls as well as seats are set aside for the use of men suffering from venereal or other contagious and infectious diseases.

During the year there have been 780 officers and men at this post, the present monthly complement being about 217. During the last quarter 136 recruits have been received from the various recruiting stations. Immediately upon their arrival here they were reexamined, their records verified, and each man vaccinated. Of the 109 vaccinated 62 (56 per cent) have been successful.

There were 238 admissions to the sick list; of this number 105 were discharged to the hospital and 14 invalided from the service. Of the number invalided from the service, 10 were rejected upon reexamination immediately following their arrival from the recruiting office, the disabilities in each case having existed prior to enlistment.

The admissions to the sick list are further classified as follows:

	Number of admissions.	Number to hospitals.
Venereal.....	95	32
Contagious.....	21	14
Scabies.....	9	7
Trichophytosis.....	5	4

Since the use of the prophylactic treatment was begun the decrease in the number of venereal cases has been decidedly noticeable. Instructions in first aid have been given periodically, the time usually devoted to this being the periods on days when inclement weather prevents the usual out-door drills.

The importance of discovering cocaine habitues early, before they can teach others in the service the degrading practice, is shown by the following extract from the report from Peking, China.

In order to promote the health and morale of this command it has been the endeavor of the medical officer to eliminate those unfortunates addicted to the use of cocaine. To date six men have been apprehended and surveyed.

In November an anonymous letter was received by the chargé d'affaires and referred to the commanding officer to the effect that several men of this guard were addicted to the use of cocaine. Previous to this time two men had been under surveillance and had acknowledged the habit.

Investigations were now conducted in a more serious manner, and it was learned that the offenders would aggregate a possible dozen.

On December 17, a man of previously good character returned from liberty suffering from the effects of an overdose of the drug. This man stated that he had contracted the habit from another well versed in the agreeable sensations experienced.

The commanding officer had given his approval and cooperation to the crusade, and three more men were now subjected to an examination. It was necessary to depend entirely upon an examination of the nasal fosse. In each instance an ulcerated condition of the Schneiderian membrane was noted as a result of cocaine snuffing. The patches or ulcerations resemble somewhat the mucous patches of syphilis. The epithelium becomes macerated and disappears. The papule, originally small, spreads. The center becomes gray or opalescent and the edges form a definitely defined irregular margin. The inflammation oftentimes progresses, and one case has come under observation with a perforation of the nasal septum incident to necrosis. Thus in this instance nasal examination has proved effective in detecting five of the total six cases, for each patient subsequently confessed to this habit.

The five cases recorded include the two which came under observation prior to November.

In three of the total six cases the habit antedates enlistment.

The remaining three are but beginners, for they have learned the habit since arriving in Peking from those who had acquired it prior to enlistment.

This is of paramount importance, for it clearly indicates the direction in which the evil must be eliminated.

In my limited experience I have been able to successfully diagnose 10 cases of cocaine snuffing from ulceration of the nasal fosse, and I respectfully suggest that

recruiting officers be instructed to make a careful examination of the nasal chamber, with the object of detecting such lesions.

It may be coincident that in less than a year and a half I have noted 20 cases amongst the enlisted personnel of the service. Certainly the habit is not uncommon.

In civil life the evil is progressing, and this increase will of necessity have its influence on the recruiting office.

No mental degenerate can hold civil employment for very long, nor should he be tolerated in the military service. The remedy is evident.

In this connection it is of interest to note that recently in a memorial presented to the Throne by one of China's viceroys, the attention of the Government was called to the fact that since laws have been established restricting the sale and use of opium the Chinese in no small numbers were finding consolation in cocaine.

HOSPITALS.

The bureau has undertaken to continue to the present time the history of the development of each naval hospital from 1893, when Medical Inspector Gatewood's valuable "Notes on Naval Hospitals" was published in the annual report; while originally intended for this report, its publication as a separate document becomes necessary on account of the advance in the date on which material must be submitted for printing. As is generally known a programme for the comprehensive rebuilding or renovation of nearly all naval hospitals has been undertaken, the extent being already indicated in the tabular statement in the section headed "Construction completed, undertaken, and contemplated." For the present the condition of the naval hospital fund will admit of obligation for very little new work, and only such as seems absolutely demanded for the care of the personnel or conservation of such buildings as promise future serviceability will be recommended. New 150-bed hospitals of an adopted type are under construction at Portsmouth, N. H., Chelsea, Mass., and in Newport, R. I.

A new building at the hospital in Brooklyn, N. Y., is under construction, while the old building has been renovated to serve as quarters for female nurses; this establishment will within a few years require extensive renovation at an expense of at least \$200,000.

At Philadelphia the hospital building has been entirely renovated and the power house of the Naval Home enlarged at an expense of \$15,000 to meet the combined needs of both institutions; separate accommodations for patients suffering from contagious disease are adequately found in the main building; quarters for medical officers are the only notably lacking feature.

The new buildings for contagious diseases and the Hospital Corps at the Naval Medical School Hospital in Washington should be completed and furnished during the latter part of this year, when the old hospital at Pennsylvania avenue and Ninth street SE. can be disposed of; three sets of quarters for medical officers, a building for sick officers, and one for the female nurses are also nearing completion.

The new wards, quarters for medical officers and female nurses, and a contagious hospital have been completed at Annapolis, Md.

The establishment at Norfolk, Va., is now complete.

The improvised hospital at Port Royal, S. C., through the efforts of the medical officer and Hospital Corps attached meets present needs, but should the complement of the station materially increase

further quarters would be required; the same comment would apply to Charleston, S. C., for which a hospital will be required if the station is developed to any extent.

The \$25,000 which has been available for a hospital at Pensacola, Fla., is of course inadequate, and the allotment of an additional sum will probably be sought; the old hospital has reached such a state of dilapidation as to be a disgrace to the naval service; the \$6,000 provided for a dispensary is also insufficient for a new building and far more than would be justified for repairs.

The 12-bed dispensary building at New Orleans (Algiers) has seemed to meet present needs.

San Juan, P. R., has temporarily adequate accommodations for all patients, while no outlay has seemed justifiable at Guantanamo, Cuba, pending the selection of a site for a naval base in Caribbean waters for which the *Solace* now provides hospital service.

At the Great Lakes station in North Chicago, Ill., the new 100-bed hospital has been completed, together with 3 sets of quarters for medical officers, garage and laundry, and stables; power will be obtained from the central plant of the training station; the only bid for buildings for contagious diseases and female nurses was so greatly in excess of estimates that the plans will doubtless have to be revised.

The work undertaken at Las Animas, Colo., is approaching completion and nothing further is contemplated beyond a limited expansion to meet the needs of the gradually increasing personnel.

The new surgical pavilion and power plant at Mare Island, Cal., are practically completed; a new building for female nurses has not been determined upon.

One 2-ward wing of 60 beds and the administration building of the new naval hospital at Puget Sound are practically completed; quarters for medical officers are yet to be provided, while the other usual accessory buildings await the future growth of the yard.

No outlay of money is contemplated at Sitka, Alaska, pending the acquirement from the Department of the Treasury of the "Crow's Nest" property, which will be admirably adapted to the limited needs of this isolated station.

Quarters for female nurses have been completed at Canacao, P. I., a laboratory has been provided, and it is proposed to convert the stable into a storehouse.

The hospital ship *Relief* has been designated as the United States Naval Floating Hospital, Olongapo, P. I., pending the establishment of a 2-ward tropical hospital of 50 beds and a power plant on a site yet to be selected. When a suitable hospital has been provided for this station motives of economy will undoubtedly call for some disposition of the *Relief*.

The bungalow formerly used as quarters for the commanding officer at Yokohama, Japan, has become so deteriorated that safety has demanded its demolition; the junior medical officer now lives within the recently completed hospital. No new hospital construction, such as a suggested contagious hospital, is contemplated for Yokohama, although an operating room may be provided within a few years.

As already noted \$6,000 has been allotted for the building of a naval hospital at Agaña, Guam, M. I., and the establishment of this new institution calls for the recording of the following hospital history of

Guam, which has been compiled in the bureau during the past summer:

During the latter part of the Spanish régime and the first part of the occupancy by the United States sick were treated in a small "cascao" (a form of rock held together by mortar and sand, much used for building material) building, termed the "Hospital." Here was established naval sick quarters by the United States in 1899 when the *Yosemite* brought fittings for a hospital.

Hospital land.—Acquired by island government for hospital purposes from various Chamorros (natives of Guam) on February 1 and April 24, 1900, and April 13, 1901. This tract is about 0.414 acre, the north line being 214.50 feet in length, the east line 92.83, the south line 209.08, and the west line 121.92.

Maria Schroeder Hospital.—Founded April 22, 1901, by subscription of 1,800 pesos and a gift from the island government of 1,800 pesos; built under direction of island government. The main building is of cascao and wood (the first story or basement of stone, second story of wood), faces west, and is 91½ feet long and 35 feet wide, outside measurements, being divided into two wards; total capacity 20 beds; a dispensary, office room, and mess room for hospital corps men. At the north end a wing (added in 1906) extends eastward 53½ feet long and 24 feet wide, containing operating room and laboratory. To the east of the center of the main building is a small structure 33 by 18 feet, used as kitchen and mess hall. Both these accessory buildings are constructed as is the main building and are connected with it by covered porches.

These buildings have been occupied by the navy as "sick quarters" since 1902, the United States Government paying the island government \$62 gold as monthly rental. One ward was used for native, the other for Caucasian males.

Arrangements are complete whereby the island government will cede outright to the United States this land and these buildings without conditions, the transfer to take place upon the completion of the naval hospital now under course of construction.

Susana Hospital.—In October, 1905, the Susana Hospital Association was founded by subscription from private individuals, the largest of which was \$10,000 from Mrs. Russell Sage, and known as the Russell Sage fund, the entire sum being known as the Susana Hospital Association fund.

The association rented from a native for the sum of \$35 gold a month an old "cascao" building and fitted it up as a hospital. It was supported by the income from the association fund, 50 pesos a month from the island treasury, results of sales made from Susana dispensary (run in connection with hospital), rental of special room to Caucasian patients, returns for subsistence and treatment from patients who were able to pay.

This building consisted of a basement (or first floor), in which were dressing rooms for out-patients, storerooms, and dispensary, and a second floor, consisting of a small general ward (capacity 4 beds) and two private rooms, one for Caucasians and one for natives. A small building connected by a terrace was used as a kitchen.

In February, 1909, the association purchased these buildings and a considerable tract of land surrounding them.

On December 10, 1909, a severe earthquake rendered the Susana Hospital for Women and Children untenable. The building was over one hundred and fifty years old and said to have been the oldest on the island. Because of the method of construction it had been rendered weaker by each earthquake, as proper repairs could not be made without much tearing out of the damaged parts and rebuilding. This had not been done, and earthquakes of more or less severity are monthly occurrences. Upon razing the old building many of the timbers supposed to be sound were found to be badly decayed, and it was fortunate that the whole structure did not collapse and bury in its ruins many women and children.

At the intercession of the governor of the island, the United States (Secretary of the Navy) agreed to appropriate \$6,000 from the naval hospital fund for the construction of a hospital to which women and children should be admitted, provided that it should be known as the "Naval Hospital," Guam, M. I. In order that this might be rendered possible, the Susana Hospital Association ceded to the United States Government on January 24, 1910, a portion of its property, the only proviso being that a hospital "for the use of women and children" should be built upon it. This building is not to be used for gangoas. The tract is 0.672 acre, the lines on the north and south being 105.42 feet and on the east and west 277.52 feet.

No endowments, annuities, or benefits were transferred by the Susana Hospital Association, and it still retains certain lands to the east which can be used for hospital purposes only.

The two pieces of land, namely, that to be ceded with the Maria Schroeder Hospital and that already ceded by the Susana Hospital Association, adjoin, the latter being immediately to the south of but extending slightly farther to the west (16 feet) of the

former. The resulting plot has upon its north a public highway (Calle San Juan Deletran), to the east private property and Susana Hospital Association property, to the south the land is owned by the island government, and to the west by the Roman Catholic Church.

New buildings now under construction upon the tract ceded by the Susana Hospital Association—Naval hospital: To be built with the \$6,000 from naval hospital fund and to be available for women and children, 50 feet to the south of and on the porch line of the Maria Schroeder Hospital, facing west, 90 feet long and 25 feet wide, with 10-foot porches, covering ground area of 45 by 110 feet first floor (basement) reinforced concrete, second floor frame.

Hospital for women afflicted with gangosa: To be built with \$4,500 from the "leper and gangosa" appropriation, 45 feet to south of and on the porch line of the naval hospital, 45 by 110 feet, including porches; first floor (basement) reinforced concrete, second floor frame.

The Maria Schroeder and Naval Hospital (when completed) will give a capacity of 50 beds. In case of emergency their porches and the gangosa hospital (female) may be used, giving a capacity of 200 beds.

Suggested construction upon the tract ceded by the Susana Hospital Association—Operating room: Reinforced concrete building, 45 by 20 feet, to the eastward and between the naval hospital and the gangosa hospital (female), to contain operating, dressing, instrument, and sterilizing rooms.

When the buildings at present underway and the proposed construction is complete, the United States will be in absolute possession of the two tracts of land referred to above, the Maria Schroeder Hospital, the naval hospital, the gangosa hospital (female) and the operating room building. All buildings are to be connected by covered porches.

It is proposed by the Susana Hospital Association to erect a building in the northeast corner of their remaining property for the use of maternity cases, severe operative cases, and as a dormitory for native nurses (female).

Hospital corps men attached to the naval station formerly slept on the porches of the hospital (Maria Schroeder) in rooms formed by temporarily screening off odd corners. Since 1903 they have occupied as quarters two "cascao" buildings across Calle San Juan Deletran to the north and east of the Maria Schroeder Hospital. These buildings are rented from Chamoros.

In general, it should be stated that it will be the bureau's endeavor to obtain, so far as varying conditions permit, uniformity in organization, administration, and equipment of hospitals, and to this end the importance of a uniform system of inspections by experts conversant through experience with the needs of the service and approved methods is emphasized. A type technique for operating rooms and laboratories is already being considered. The commissary problem is gaining greater attention and unless a commissary corps is developed there will be need for an increased allotment for pay of civil employees who at best can not be expected to render the services required for properly meeting the dietary needs of the sick; with a commissary corps of stewards and cooks attached to the medical department it would be important to provide the services of one or more women dietitians, trained in the chemistry of practical cooking to visit hospitals and by unifying the systems, while improving the service, economy would be at once promoted. The commissary corps might receive instruction in connection with the cooking school at Newport. Attention is invited to the table of surgical operations to be found in the statistical section.

Extract from report of Naval Medical School Hospital, Washington, D. C.:

The accommodations for enlisted patients is ample for this station and apparently there will be no expansion of the hospital necessary so long as the enlisted force is not increased much beyond its present strength. The number admitted is, indeed, higher than ordinary demand, as it includes an overflow transferred from the naval hospital at Norfolk during extensive rebuilding work going on at that institution during the year, although on the other hand the reduced number of marines at the

barracks since the departure of the Nicaraguan expedition in October would again tend to approximate the admissions to a normal annual rate.

This has not been the case in regard to officers, as a large proportion of them have been received from ships in commission at sea, from other stations and from officers on leave, waiting orders and on the retired list. Therefore it has been found necessary at times during the year to put two officers in a room, to await a vacant room, or to discharge a few from hospital as early as safety permitted in order to make room for others. With the completion of the new building for accommodation of officer patients ample room will be afforded by the addition of 20 new beds.

A marine guard reported for duty at this hospital June 14, 1910, consisting of 1 gunnery sergeant, 2 corporals, and 15 privates.

A prison for the safe-keeping of court-martial prisoners transferred as patients to this hospital was fitted up, a room under ward D being found suitable for the purpose; this is commodious, well secured by means of bars in the two windows and a steel door with strong bolts and a trap door within the larger door for ready inspection. This prison ward is also heated by means of radiators placed near the ceiling.

The annual report from naval hospital, Norfolk, stated in part:

Over 40 per cent of the diseases treated were of the general infective class, which in general shows a slight decrease in the number of cases treated, there being 24 cases less this year than last. The number of days lost, 15,997, is increased by 1,303; mumps was responsible for the increase of sick days, there having been 254 cases with 6,102 sick days as compared with 1908 when there were 169 such cases with 2,629 days lost. This disease occurred at the St. Helena training station from which several of the battle ships became infected through drafts of ordinary seamen. With the present system of housing recruits at the station the indications are that there will be a reduction in the number of cases in 1910.

Veneral diseases were responsible for the loss to the service of 11,972 days—nearly 25 per cent of the total loss—and there were 261 representatives of this class, as follows:

	Cases.	Sick days.
Syphilis consecutiva.....	126	6,355
Gonorrhoea.....	40	1,555
Adenitis inguinalis.....	30	1,604
Arthritis gonorrhoeica.....	17	729
Chancroid.....	13	679
Orethritis.....	10	325
Epididymitis.....	8	236
Ophthalmia gonorrhoeica.....	7	144
Urethrae strictura.....	4	190
Verruca acuminata.....	3	100
Syphilis primitiva.....	3	75
Total.....	261	11,972

Of the 1,411 patients who received treatment, over 60 per cent of them are classified under general infective diseases and venereal diseases and both classes belong to "preventable diseases."

Although there were in comparison less than half as many patients suffering with venereal troubles as with infectious disease the days lost by the former were but 4,025 less, being, respectively, 11,972 and 15,497. The increase in venereal diseases this year over 1908 has been practically confined to syphilis. With the return of the fleet in the first quarter of the past year there were 28 cases received, during the second quarter 27 new cases came to the hospital; the third quarter brought 31, while the fourth furnished 40. It would appear, therefore, that the disease was largely contracted at our home ports and that the increase over the preceding year is due entirely to the greater number of men exposed in our own cities. Gonorrhoea and gonorrhoeal arthritis is reduced.

From Annapolis, the following is noted:

For the pay it does not appear that a skillful experienced cook can be obtained, one who can be trusted to furnish dishes which will satisfy the capricious appetite of the sick. I believe it would be a step in advance if a trained corps of enlisted hospital cooks were added to the Hospital Corps of the Navy. This corps could probably be recruited from cooks of experience in the service who would be glad to have permanent shore appointments.

The fleet surgeon in his inspection report of November 8, 1909, on Canacao, said:

During the last six months the general appearance of the grounds included in the hospital reservation has been greatly improved by filling in low places, by grading, and by attention to roads and lawns, which work is being continued and extended as rapidly as time and funds permit. A substantial fence is being erected to inclose the built-up portion, to keep out the predatory pigs and dogs straying from the neighboring "barrio."

Ice machines have been installed, and cold-storage and laboratory buildings and a morgue are nearly completed. The artesian water supply being insufficient for all purposes and likely to fail in case of fire, extension of piping for a water supply from the bay for a salt water condensing system is contemplated. The installation of this system is urgently indicated and should be commenced at once.

The hospital force at present consists of 5 medical officers, 5 hospital stewards, and 21 hospital apprentices. On the day of inspection there were 2 officers and 85 enlisted patients. In addition to the hospital proper, there is an out-patient department in which natives from the surrounding region are treated. This latter is growing to such an extent as to require the services of one medical officer alone, the number of cases applying for treatment being limited only by the lack of a larger medical force. These patients are very poor, and their remoteness from Manila and the absence of civilian practitioners make relief almost compulsory.

The hospital force is none too large. The administrative work, the large number of surgical operations and medical cases, and the laboratory work, so necessary to establish a diagnosis in diseases incident to a tropical climate, occupy to the fullest extent the time of every officer. In the absence of other accommodation, this hospital is required to receive a number of supernumerary government employees, increasing the usual proportion of admissions as compared with other stations.

The nature of the local diseases, the professional mediocrity of the few native "practicans," the absence of specialists, and the abundance of clinical material, all combine to make the Canacao Hospital an excellent school for young medical officers, and it is to be regretted that a greater number can not profit by the opportunity.

The number of medical officers on this station has been too small to provide for the contingencies of sickness and unusual service demands, and it has been found necessary to draw upon the already small force at this hospital, diverting medical officers from lines of special work and research to meet outside contingencies.

A large force of hospital corps men should also be maintained here for instruction, and as a reserve for unusual and unexpected demands. The length of time necessary to get men out from the United States, in the absence of an excess supply, causes embarrassment when it becomes necessary to replace men who are invalided, whose ratings are changed, or whose enlistments expire.

CRUISING SHIPS.

On board ship even more than ashore the Medical Department's activities pertain to sanitation quite as much as to the care of the sick, and the valuable sanitary reports received, as well as the many contributions to the Naval Medical Bulletin, show that with few exceptions this fact is appreciated.

The important items aside from those already discussed which have engaged attention recently in ship sanitation may be briefly outlined as follows:

Before ships are placed in commission they should be thoroughly cleaned, and, if practicable, fumigated; rats and vermin should be killed and trap guards used thereafter. Rooms and offices should be disinfected at reasonable intervals, and especially during cleaning incident to each change of occupants. Each medical officer should give his individual attention to the fly and insect problem as well as to the detection of human typhoid carriers on board ship. The tint of interior spaces might better be a pale green, as adopted for study rooms at the Naval Academy, in order to do away with as much contrast and glare as is consistent with receiving the full benefit of

reflected light; either the stalactite globes or an indirect or better distributed lighting of officers' quarters would well repay in comfort for the slight increase in expense of current and installation to safeguard the eyesight of officers.

The report from the *Rhode Island* stated:

In regard to the illumination of the rooms inside the armor occupied by the junior and warrant officers, I would suggest the installation of several four or eight candle-power lights so distributed as to give an equal illumination over the entire room, with a droplight for reading. The sudden change from a bright light to darkness, as at present, can not fail to leave a bad effect on the vision of the occupants of the rooms.

If the portable sanitary scuttle butt devised by Surg. E. G. Parker for the engineer's force on the *California* proves acceptable, as now seems probable, it should be adopted for all ships without delay. The Gates "bubbling-spring" scuttle butt has now been installed on nearly all large ships; its use should be extended to meet the needs of the entire personnel. The principle of vacuum cleaning could well be adopted for spaces between decks. A mattress and outfit sterilizer has been provided for the *South Carolina* and has been advocated for other large ships building. The facilities of ships' laundries should be extended to all. Such overcrowding as is described in the report from the *Buffalo* ought to be rendered unnecessary:

Overcrowding: Three or four times during 1909, for periods varying between five days and ten weeks, there has been great overcrowding. The limit of capacity being 500 men (as stated in last year's report). The greatest departure from the capacity was when a total of over 900 men were taken from Panama to Shanghai. On December 13 the Nicaraguan expeditionary force of marines came on board, and since then to the time of writing the total number of people on board has varied between 941 and 956, the former being the number now on board. The overcrowding on these trips has been not only amongst the men, but also amongst the officers. There are 30 staterooms on this ship, including the captain's quarters. During the first trip mentioned there were 40 officers. When the *Buffalo* left Panama on December 17 there were on board 49 officers and 3 civilians. This lasted for only about five days, when the number was reduced to 46, at which it still remains. As was mentioned in last report, and as it is at present, considerable living space is taken up with stores and impedimenta, producing still greater overcrowding. Apparently the only remedy for this condition is to get more or larger ships for this duty.

Careful study is desired of automobile goggles for use on torpedo boats and destroyers, practicable methods for removing powder gases, occasioned by firing charges and bursting shells, from turrets or deck spaces, either by shutting down ventilation during action to avoid drawing in gases from outside the ship, or by the use of compressed air within the compartments. The recording of observations of temperatures and carbon dioxide content of forward compartments, as required by the order of July 12, 1910, of the commander in chief of the Atlantic Fleet, will doubtless soon demonstrate whether the new mushroom ventilator cowl supplied to the *Connecticut* is to solve the serious problem of insufficient ventilation forward when ships having air intakes lower than the superstructure deck are taking water over the forecastle.

The fleet surgeon reported in connection with the development of cases of smallpox on the *Washington*:

On January 22, 1910, while the *Washington* was at sea making passage from Yokohama to Honolulu, two men were placed in the isolation ward, as they were suspected of having epidemic disease. The cases were ultimately discovered to be smallpox, and the ship was then ordered to proceed to Honolulu ahead of the rest of the squadron. At that time the weather was fair, but as there was an ordinary rough sea the forward

cows had to be unshipped. The isolation ward, which is not well ventilated at any time, was thus deprived of air, and the patients were removed through the length of ship to the stateroom on the starboard side, provided for the commanding officer should the *Washington* be utilized as a flagship.

Of course the unshipping of the forward cows deprives much of the ship of ventilation, and, as that situation is not uncommon, it offers an important problem that will have to be solved not only in relation to the *Washington* but also in great measure to all the ships in this fleet before satisfactory conditions can be secured at sea. It is at sea that artificial ventilation is chiefly required.

The first paragraph of the indorsement of the "Aid for inspections" follows:

All ships of this class have reported repeatedly since first commissioned upon the artificial ventilation forward while underway. The intake consists of a large pipe and cowl, an awkward thing to handle, but which must be taken down and stowed away even in a moderate seaway when steaming 13 knots or upward. This intake should be located elsewhere whenever these ships are laid up for extensive repairs.

Electric bake ovens are to be installed on all first-class ships now in commission where the dynamo capacity is sufficient.

The sanitation and particularly the ventilation of submarines under cruising conditions merits thorough investigation and reports thereon are particularly sought; attention is invited to the advisability of equipping this type of vessel with oxygen generators of the sodium dioxide type as a safety measure. The medical officer of the *Castine* reported:

I have to report that an inspection of the submarines *Tarantula*, *Viper*, and *Plunger* on Sunday, October 24, 1909, shortly after they were moored alongside the *Castine*, showed their sanitary condition to be far from satisfactory, notwithstanding the fact that they had been at sea only about forty-five hours.

One officer and a crew of 10 or 12 men had been living, that is sleeping, cooking, eating, and answering the calls of nature aboard each of these boats in addition to performing their duties navigating them.

Being small, they pitch and roll considerably in a smooth sea, and about half the crew become seasick, due largely to the foul air in the boats; when the sea is moderately rough, practically the whole crew is seasick. Food has to be carried in crates and, when preparing for a cruise of several days, cramps very much the already overcrowded boat; even the cooked meats soon spoil, increasing the foulness of the air, and the use of the toilet, which is only screened off, adds to the unpleasant odor.

The small electric stoves with which the boats are supplied can not furnish heat enough, hence they are cold and damp at certain seasons of the year and, in rough weather when water is shipped down the conning tower hatch, which must be kept open, they are wet and extremely uncomfortable.

These conditions are a serious menace to the health of the members of the crew; there seems to be no remedy for them on prolonged cruises.

I have the honor, therefore, to recommend that cruises be limited to not more than thirty-six hours, and that, when not underway, the crews of the submarines, except those absolutely necessary to be on the boats, live aboard the parent ship.

So much has been said in former reports and in lectures by naval medical officers at the Naval War College emphasizing the vital need of the regular and unrestricted assignment of from 2.5 to 4 per cent of the crew of all but the latest all-big-gun ships for duty under the medical department in action as "stretcher bearers," that space will not be taken now for repetition, particularly as there are signs that this requirement is receiving somewhat wider recognition among responsible officers.

From the comments of the medical officer of the *Michigan*, quoted below, it would appear that in the new type of ship fewer trained assistants will be required during the brief period of action and that more reliance must be placed upon the elementary first-aid instruc-

tion given to all. Each battle ship of later date than the *Michigan* and *South Carolina* is equipped with two permanent battle dressing stations with large dressing lockers, hot and cold water, and independent lighting circuit on the berth or protective deck, but below a substantial splinter deck; one is forward of, and the other abaft all turrets, and both are roomy and as accessible as water-tight compartments will admit. Regulations should be so amended that medical officers shall give frequent and specific first-aid instruction to the division officers who should in turn instruct and be held responsible for the proficiency of all enlisted men, save those assigned to the medical department, in the immediate care of wounded shipmates. In this connection the allowance of surgical dressings has been materially increased, dummy dressings for drills will be provided, and it is proposed in preparation for war to have each supply depot maintain a list of firms, with bids revised from time to time, who may be called upon to furnish without delay large quantities of medicines, dressings, and instruments.

The organization of the medical department for battle in the all-big-gun ship of the *Michigan* class differs from the older types of battle ships in which there are main and secondary batteries. The new idea is centralization, the fighting force being divided into two sections; one in action, the other in reserve, both stations behind armor, the former in turrets, handling rooms, and magazines, and the latter at some place accessible to the turrets. There will be only four persons exposed above armor, two at the range finder and two on the fire-control mast.

On account of this centralization of forces, the organization of the medical department is simplified by combining the relief stations and action dressing stations, thus concentrating the attention of the medical officers and hospital corps on the wounded.

It is unfortunate that in designing the interior of the ship there were not two spaces behind armor fitted for dressing stations and provided with light, air, water, steam for sterilization, and also means for drainage. Two dressing stations have been improvised behind armor, one well forward and one in the after part of the ship, both accessible as possible. The surgeon's division is divided between these two, and, in addition, there are four stretcher bearers allotted to each. The usual equipment of gauze, cotton, bandages, anesthetics, tourniquets, basins, buckets, etc., is provided. Each station has a telephone connection and can be called up from any part of the ship. In case of casualty the stretcher bearers and a hospital apprentice respond, the latter giving such aid as may be necessary, as administering a stimulant, looking after a broken limb, and assisting in the transportation, the first-aid or shell-wound dressing having already been applied by a shipmate.

It is impossible to estimate the percentage of wounded in a fight to a finish in ships of this type, and how they are to be treated and transported, for the water-tight doors are closed during action and passage is impossible. The part of the crew in action is practically isolated in the turret, that in reserve in water-tight compartments, and the engineer's force below, so there will have to be a greater dependence upon first-aid measures; the best we can do is to have each member of the crew furnished with the first-aid package or shell-wound dressing and familiar with its use.

There is not apt to be much work for the surgeon until the smoke of battle has cleared and the fight is a matter of history, when the perfectly equipped operating room and sick bay [if not unduly damaged] which are not behind armor, can be used, and transportation will not be impeded.

The result of a fight between two well-matched ships of the class under consideration is apt to be much more dangerous to the material than the personnel unless there is total destruction of one or both, and this can be readily understood when it is remembered that the eight 12-inch guns of this so-called "near dreadnaught" can fire a broadside of nearly 7 tons of metal a minute with a muzzle velocity of 2,700 feet; it will be overwhelming, for neither human frames nor steel frames will be able to withstand the impact and explosive effects many minutes, and the wounded will either be cared for shortly or be beyond surgical help.

The following extract from the report of operations by the commander in chief of the Atlantic Fleet dated April 30, 1910, indicates a sanitary problem which merits the attention of all concerned; its

practical and economical solution will be a boon to other stations which are confronted with similar conditions:

Crews from the ships manned the combined water and garbage lighters during the entire stay. These lighters were in constant use delivering water, removing garbage from all the ships, and dumping the latter in the open sea outside the bay. In this connection the commander in chief recommended to the department that the matter of installing incinerators on board battle ships be considered with the end in view of disposing of all refuse in the shape of garbage on board each ship while in port. Some arrangement for the disposal of material of this character is necessary in such ports as Guantanamo Bay, Narragansett Bay, and at Provincetown. It would seem that an incinerator of suitable capacity and size could be installed on board each ship which would add materially to the welfare of the fleet and eliminate the necessity of garbage lighters with the complications incidental thereto in coming alongside, receiving the garbage, and moving it to the dumping ground, together with the necessity of moving such a lighter from port to port in order to have it available.

Having received unofficial information to the effect that an incinerator of sufficient capacity can not be obtained without prohibitive size for use on board ship the commander in chief has requested the department to provide a power lighter for use with the fleet at Provincetown and Narragansett Bay during the summer but respectfully urges that the question of obtaining a suitable incinerator be further prosecuted as such installation would prove materially beneficial to the fleet.

The following extracts from annual sanitary reports of ships possess sufficient general interest to merit publication:

U. S. S. Chester.—As a rule the facilities for bathing and scrubbing clothes are good on all naval vessels, so long as they remain in warm or temperate climates, but when in a northern climate during the winter season they are not so good, and one can not expect the enlisted man at this time to keep his clothing and person as clean as would be desired. Naval vessels usually spend the winter seasons south, but at times they are compelled to spend periods of this season at the various navy-yards. The above defect could be greatly overcome by making provision at the various yards for the men to bathe and scrub their clothes in a comfortable place with plenty of fresh hot water at their disposal. This would not only be a great advantage to the crew while the ship is in the dry dock, but during its entire stay at the yard. All that is required would be to build and locate in convenient places suitable brick sheds with the necessary internal arrangements for this purpose. These buildings would be inexpensive and would greatly add to the cleanliness and personal comfort of the enlisted men while at the navy-yards.

U. S. S. Connecticut.—The sanitary condition of the ship and the health of the ship's company may be considered as having been good during the year if we except the venereal diseases and the months during March, April, and May, while at the navy-yard, New York, at which place it was poor.

A total of 202 cases of general infectious diseases and tonsillitis occurred during the year and during the second quarter, the period when the ship remained continuously at the New York yard, the following developed:

	Cases.
Catarrhus epidemicus	8
Febris pneumonica	2
Febris rheumatica	3
Malaria	1
Pyrexia ortus incerti	9
Scarlatina	4
Tuberculosis	3
Varicella	1
Tonsillitis	55

A total of 86—being almost half the number that occurred during the year. Again, comparing the second above quarter with the third or period in which the ship remained away from a large city or navy-yard:

	Cases.
Febris rheumatica	3
Febris typhoides	1
Malaria	1
Morbilli	1
Parotiditis epidemica	1
Pertussis	1
Pyrexia ortus incerti	4
Tonsillitis	15

A total of 27—nearly all occurring early in the quarter, showing the contagion received while at New York.

This demonstrated what has been frequently if not always observed when a ship visits a navy-yard for a lengthy period—a marked increase in the number of sick, due probably to the relaxation in discipline and more frequent and longer periods of liberty.

For battle, four dressing stations are fitted within the armor belt, as follows: (1). Petty officers' quarters; (2) blower room near laundry; (3) junior officers' mess room; and (4) warrant officers' mess room.

During drills these stations are partially fitted out with dressings and instruments, and here are stationed medical officers, hospital attendants, and 16 men of the crew. In battle these latter 16 men, who have been instructed in first aid, would go without the armor belt bringing the injured to the dressing stations. In no case would the medical officers or hospital attendants be allowed without the armor belt since they would be employed at the duties of their vocation and the risk of injury to themselves would not be sanctioned when their services would be urgently needed at the cessation of the battle. In actual battle the entire outfit of the operating room, with all dressings and necessary articles, would be placed temporarily within the armor belt, since the medical department is so located that they would probably be destroyed.

U. S. S. Dixie.—One case of pneumonia was contracted ashore at Washington, D. C., incident to exposure in the inaugural parade.

From a medical and sanitary standpoint the *Dixie* has been a very important factor in her rôle as parent ship for the Atlantic Torpedo Fleet. The great advantages of the ship's cold-storage compartments have been utilized daily by the fleet, as have also her large store and issuing rooms. It has added greatly to the comfort of the crews and officers of the various torpedo boats, by affording opportunities for their use of the shower baths, canteen, and barber shop. Its medical department, with its large sick bay of 16 beds, dispensary, bath, and operating rooms, has been of enormous advantage to the fleet by providing convenient and easily accessible quarters for their sick, thereby preserving the men for their respective ships instead of transferring them to a hospital as formerly.

U. S. S. Dubuque.—During the year this ship spent 318 days in port and 47 days at sea. The months from January to October, inclusive, were spent in the Tropics, with the exception of parts of May and June, in which months the ship visited New Orleans, La. With the exception of the time in New Orleans this ship has been in the Tropics continuously for ten months, including all the summer months. The heat, while seldom excessive, was constant and the thermometer showed little change from day to day. The constant moist heat had a marked effect in lowering the physical stamina of the crew. This effect, while shown in the general appearance of the men, was also evident by the common occurrence of boils, abscesses, and the tendency of the slightest abrasions or cuts to become infected. While the conditions in the Tropics favor all bacterial life, and especially that of the pus-producing varieties, it is believed that the lowered vitality induced by the constant moist heat is the most important factor in causing the superficial infections and skin diseases.

The ship went directly from the Tropics to the most northerly station at Portsmouth, N. H., arriving on the 6th of November. The change from the tropical heat to the cold of a New England winter produced the expected crop of tonsilitis and respiratory affections. In the Tropics a number of the men slept on deck during all the good weather. In the North this was impossible and the rather limited berthing space, with the natural tendency of the men to avoid the blasts of cold air from the ventilating system, was responsible for a low degree of ventilation and thus a condition favoring the spread of disease and the lowering of bodily resistance.

In this connection it is urged: First, that neither officers nor men be kept on this isolated tropical duty for sufficient time to develop the physical and mental torpor with the lowered resistance to disease which are so commonly seen in men having served long periods in the Tropics. Twelve months is the maximum period recommended for such duty; second, that ships having this duty be sent to a suitable liberty port at least once in two months; third, that ships assigned to this duty, when ordered North in the winter, be sent to one of the more southern navy-yards and one more suitable for liberty.

U. S. S. Glacier.—The ship has been disinfected once by sulphur dioxide to destroy rats. Rat virus (*Azoa*) was used with only partial success and fumigation was employed as a last resort. The rat question on this ship is an important one, as there is always an abundant food supply, while a full cargo furnishes many inaccessible spaces which render it impossible to get rid of rats until the holds are empty.

U. S. S. Helena.—This vessel has been for the past year station ship at Hongkong, and during that time the ports of Canton, Swatow, Amoy, and Shanghai have been vis-

ited. Although smallpox, plague, and cholera are endemic in these ports the ship has been free from all infectious diseases, with the exception of one case of smallpox, which occurred last April while en route to Shanghai. The entire ship's company has been repeatedly vaccinated.

U. S. S. Prairie.—In December a regiment of marines was carried from Philadelphia to Cristobal, Canal Zone. After landing them the ship was ordered to Bluefields, Nicaragua, where we are now engaged in furnishing supplies and baking bread for the thousand or more prisoners from the defeated government army ashore.

U. S. S. Montana.—It is noted that the crew, who on going into commission in July, 1903, were practically recruits and generally of poor physique, many requiring transfer to hospital and ultimate survey, have developed physically, and that the incident of sickness falls amongst those who are more recent recruits. The older men become adapted to ship's life, and are gradually trained and instructed to preserve their health. Experience may also be an important factor in this respect. This is also especially true of venereal disease. The recruits are a problem as far as cleanliness of body and clothing is concerned. This leads in time to a certain amount of sickness. The man older in the service has, as a usual thing, a clean person, clean clothing, and a sense of cleanliness as to the compartment in which he sleeps, or of which he has supervision. It is considered that enlisted men with slightly "deficient mentality" "poor physique," etc., or those who are unable to perform the duties of their ratings should be surveyed and discharged from the service; such men are found usually to be a source of uncleanness and danger to the health of all on board.

This would necessitate many medical surveys, but it is considered that it would eventually decrease the percentage of sick and increase the efficiency of the enlisted personnel. Under the general hygienic conditions after a sufficient ventilating system is supplied, the absolute cleanliness of the personnel and ship is considered as the most necessary. Food, supplies, clothing, etc., are always inspected by the proper authorities. The health of the crew, by navy regulations, is carefully observed by all officers on board.

It is considered that the enlisted man is the unit on which the health of the ship is built, and that anyone suffering from physical defects is a menace to the general hygiene. Men who are apparently well at recruiting stations and training stations break down under ship life, where physical defects become apparent; such have much reduced the efficiency on board ship, and it is believed that from observations made any doubtful cases should be rejected on recruiting, rather than be held in the service in the hope that they can stand the physical requirements of active duty.

U. S. S. Nebraska.—The present manner in which the food is served to the sick who are too ill to go to their messes, but who are not on special diet, is not satisfactory. The whole meal is piled up on one plate and brought to them. The patients who are on special diet from the officer's mess are but little better off, as the food reaches them cold. It might be possible to have a cook in the pay department, part of whose duties would be to prepare the food for the sick. A diet list could be made out every day by the medical officer, which could designate such parts of the regular ration as he considered fit for the patients, together with such other articles of diet as he thought necessary, and turned over to the commissary steward and prepared by the diet cook. This food could then be served to the patients in a more attractive manner than at present.

U. S. S. Pennsylvania.—It seems to me that there should be a sick bay for peace times on the gun deck where more light and ventilation could be obtained. It has frequently been necessary to keep sick men on the after bridge in an improvised sick bay for weeks. This greatly emphasizes the necessity for a hospital ship with each fleet.

In closing I would earnestly recommend that a regulation be promulgated making a certain number of men (preferably the band) permanent first-aid men, who at general quarters should report to the medical officer. In my opinion it is utterly impossible and unnecessary to instruct all gun crews in everything pertaining to the handling of the wounded and the care of the injured, except in so far as applies to the immediate control of hemorrhage. The more serious work should be in the hands of better-trained men, and again a gun should not be crippled by its crew leaving to transport wounded men, and in time of war the number of hospital-corps men should be greatly increased.

FLEET SURGEONS.

The position of the fleet surgeon in relation to the remainder of the personnel seems to approach gradually that desired for the efficient direction of his activities but, while it is a source of gratifica-

tion that the recognition of this officer's proper functions may be eventually attained through merit and moral force, it is hoped that sections 1373 and 1374 of the Revised Statutes will soon be amended as urged in last year's report.

Even if it were not desirable for administrative purposes, the designation of division surgeons should prove a stimulus to younger officers to develop an interest in medical and sanitary matters outside their own ships, to help share responsibilities with the fleet surgeon and thus prepare themselves for eventual duty in that office.

Many of the sanitary and inspection reports rendered by fleet surgeons have already been quoted or referred to which indicate the wide field of their purview. As an illustration of the character of report which proves of great assistance to the bureau the following extracts are taken from report of the fleet surgeon of the Pacific Fleet:

Attention is asked to the statistical report of the *Helena* for the second quarter. It appears that there were two cases of variola during the quarter and it is inferred that the cases led to the vaccinations reported. But, out of 233 vaccinated, 41, or nearly 18 per cent, had no evidence of previous vaccination and furnished 100 as the percentage of success. In 190 giving evidence of prior vaccination 124 successes were obtained, a percentage of about 65. It should not be practicable to obtain such a large percentage of success on a ship. The statistical reports of the fourth quarter from vessels of the first squadron have not yet been received, as the vessels are scattered. But in the face of a cruise in the Far East there were a number of vaccinations with probably too many successes for a force afloat. It is not uncommon in inspecting ships to find men recently received without good or any vaccination scars. It is believed that most crews will give from 15 to 25 per cent of successes on revaccination and that more primary consideration is required on receiving ships even with increased attention to the subject on cruising ships.

The marked reduction in the sick bay of the *Washington* may indicate the general tendency in that direction. On that ship a partition has been made by which about one-third of the sick-bay space has been lost for utilizing apparently merely as a store-room for lumber and odds and ends difficult to store without causing a disturbing noise at sea.

The prophylaxis in venereal disease furnishes a strong argument for more room in sick bays than is occupied by the sick, and work in that direction will be seriously hampered on the *Washington*, as those large ships have large liberty parties and neither the sick nor the sick calls should be disturbed by such prophylactic work.

It seems to be important in that connection for the space taken from the medical department of the *Washington* to be restored without delay to that department. Besides, if this prophylactic work is to become a naval feature, special permanent arrangements should be made to keep it out of the sick bay proper. It constitutes a direct attempt to limit those diseases that cause the greatest damage, and on a large ship the conditions will strongly tend to defeat a very important work unless a separate and sufficient space is provided.

HOSPITAL SHIPS.

The services rendered by the improvised naval hospital ships *Relief* and *Solace* have demonstrated, apparently to the satisfaction of all, their great usefulness in times of peace and their close relation to military preparedness for war is fast becoming axiomatic in our own service as it has in those which have recently experienced the casualties of naval battles. The bureau would be considered grossly remiss in its duty did it not renew the recommendations for one, and ultimately two, specially built hospital ships which have appeared in practically every annual report for the past eight years. The extensive arguments for these ships need not be reiterated, but they have acquired even added force in view of the experience gained

by the fleet and its officers in the presence and absence of the *Relief* and *Solace*. In the matter of the care of the wounded after battle it may be affirmed that, perhaps in contradistinction to all other departments of the navy which are prepared for war, the Medical Department is maintained essentially on a peace basis; the results of the breakdown which can now be foreseen in the humane and effective handling of several thousand wounded in the early days of the conflict would be appalling. While there is recognition that colliers, repair ships, and other auxiliary vessels can not be dispensed with, the vital necessity of providing hospital ships has thus far failed of general acceptance. If the fleet is to operate in time of war on a 16-ship basis with some 15,000 men engaged, with an estimate of from 20 to 30 per cent of wounded to be cared for, the hospital ship *Solace* would be of about as much use to the fleet as would a dressing station to an army. The glory of a conspicuous victory has oftentimes been overshadowed by the failure of the inadequate medical department of the victorious force through the public censure of the lack of foresight shown.

Military preparedness for further, perhaps almost immediate, conflict demands the prompt removal of the wounded; likewise the dictates of humanity make this same appeal. If economy is to be weighed against human lives, then the benefit should invariably be given the latter.

In view of the foregoing the department is earnestly urged to seek authority from Congress to proceed without delay with the designing, building, and equipment of a 500-bed hospital ship with oil burners, turbine engines, a cruising speed of the fastest battle ship, and with a wide steaming radius. A second such ship is imperatively needed for service with the Pacific Fleet and to supplement the sister ship and the *Solace* wherever naval operations seem likely. There is every reason for commissioning these ships in time of peace, not only to care for the sick and injured of the fleet, but to provide drill in organization, equipment, provisioning, signals, and above all to clearly establish a condition of unblemished neutrality according to the tenets of the Geneva Convention for all times both in peace and war.

Any condition that might arise which would seem from a military point of view to justify violation of the neutrality of the hospital ship might be looked upon almost in the light of a national disgrace.

These ships should be so liberally equipped with such boats that they would be able to do all the ambulance work of the fleet; the boats should be stable and seaworthy, so that transfers may be made in any seaway in which it would be reasonable to lower small boats.

The services of the *Relief* and *Solace* have shown in an amateur way a little of what might be accomplished if suitable ships with proper equipment are provided.

Hospital ships should have sufficiently large storerooms to carry extra supplies of surgical dressings for allotment to battle ships in time of war. The *Solace* has such additional space available.

Although the *Solace* was placed in service on November 20, 1909, no patients were received from the fleet until her arrival at Guantanamo Bay, February 3, 1910. From this date until April 28, when the ship was ordered to Charleston, 238 cases were admitted. These

included typhoid fever 12 cases, pneumonia 4, and rheumatic fever 14; tuberculosis, measles, scarlet fever, and erysipelas were also transferred. There were 11 operations for appendicitis and 5 for rupture; other surgical operations were for the relief of abscess of gall bladder and mastoid, kidney stone, hemorrhoids, and numerous other conditions. There were no deaths.

In his reports of operations, dated April 30 and June 30, 1910, the commander in chief stated:

The hospital ship *Solace* has acted as a base hospital and has shown the advantages of such a ship, in the ability to immediately transfer cases of a serious magnitude or those having a prolonged convalescence. While in Guantanamo Bay, medical and surgical clinics were established on this vessel, and held on Wednesday and Saturday mornings, at which the medical officers of the fleet attended. This is probably the first time such clinics have ever been inaugurated on board any ship.

The hospital ship has been most efficient as a fleet auxiliary. The professional work has been of the high character to warrant the confidence of officers and men. The transferring at sea of sick during the recent target practice was an additional proof of the use of the hospital ship.

Owing to an injury to her main engines and the breaking down of the ice machine on board the *Solace*, that vessel was not able to leave New York for Guantanamo Bay until January 30, although it was intended that she should sail on January 7, the day the fleet sailed. On another occasion that vessel was delayed at Hampton Roads for two days, due to an accident to the ice machine, and was unable to be with the fleet on the southern drill ground during that period.

The *Relief*, having been found unseaworthy by reason of the light construction of its superstructure, was placed out of service as a hospital ship on June 10, 1910. It is intended to continue the valuable and necessary services of this vessel as a floating hospital at Olongapo until such time as a small tropical hospital is established and equipped on shore.

In his report of inspection dated October 15, 1909, the fleet surgeon stated:

Since being stationed at Olongapo, the *Relief* has served a very useful purpose in caring for the sick at the station. Important and serious operations have been performed on board, not only among the enlisted force, but among officers and their families, the female portion of whom would have been compelled to go to some hospital at Manila. There is no doubt that in some instances lives were saved by prompt operation, which, in the absence of an aseptic hospital and operating room ashore, could not have been done. With its thorough equipment of laboratory, X-ray outfit, presence of a dentist aboard, and other adjuncts of a good hospital, much valuable work has been done. The daily average number of cases has been about 40, and the absence of a proper hospital ashore justifies, in my opinion, her presence here as long as she is not seaworthy nor in shape for uses elsewhere. In case she should ever be removed, a proper hospital will be absolutely necessary ashore. I found her thoroughly clean and in excellent condition, with perfect arrangement and facilities for treating the sick.

The following extracts from the annual report are quoted:

Thirty-seven operations classed as major, and 70 minor operations were performed. Among former were 7 for appendicitis, 2 for gallstones, 1 for intestinal obstruction caused by old peritoneal adhesions, 2 for liver abscess, 1 for duodenal ulcers (posterior gastro-enterostomy), 6 for radical cure for hernia, and 1 external urethrotomy.

All of these operative cases returned to duty or are convalescent, with the exception of one case of cholecystostomy complicated with infected cholangitis and perforations of bowel by calculus, which terminated fatally.

In conclusion, if the *Relief* is to be retained in the service as a hospital at this station, the recommendation made in my last annual report regarding placing the ship alongside the sea wall is again respectfully submitted. The necessity for a better equipment than that furnished by the sick quarters at this station is evident. The buildings are dilapidated and not of a character to justify performing any major operation, while the long and often rough, sometimes impracticable, trip to the naval hospital at Canacao is hazardous for one seriously ill or injured.

Malaria is evidently traceable to exposure to the bites of infected mosquitoes on "hikes" along the trails, in native villages, and especially to exposure at the marine rifle range at Maquinaya. It is hoped that the screened quarters erected at the range will decrease the number of cases, but if night liberty to Subic and other native towns is permitted the good effect will be largely nullified.

No case of malaria has been invalidated home, but in some the disease has proved very resistant. All require much larger doses of quinine than are usually recommended, 6 to 8 grams daily being necessary in the more severe infections, especially when repeated infections had been treated by small doses. Some cases have shown intense prostration requiring saline by hypodermoclysis or intravenously. Others have exhibited pneumonic or dysenteric symptoms.

The true cases of dysentery invalidated home were not traceable to any special preventable condition, the patients claiming to have followed the prescribed precautions in regard to food and water.

The cases of middle-ear inflammation are about equally divided between those existing prior to enlistment and those traceable to infection from bathing in sea water, which has caused a number of severe cases, starting as an inflammation of the external canal with rapid ulceration and perforation of the ear drum; the plugging of the ears with oiled borated cotton and abstaining from deep diving might prevent much of this. So much benefit in other ways is derived from swimming that its interdiction seems hardly justifiable.

The loss of efficiency from venereal disease as shown by the hospital records is principally due to tertiary syphilis which has been insufficiently treated and in many cases unrecognized. The most of the cases are of some years' duration. The local system of prophylaxis apparently reduced the amount of infection on this station.

The cases admitted under the heading "pyrexia ortus incerti," include many subsequently found to be malaria or dengue, but leave some which differ from both and will probably eventually be found to be a specific disease.

STATISTICS.

Statement of the work done by the Record and Pension Division of the bureau during the fiscal year ending June 30, 1910.

Pension cases remaining on hand June 30, 1909.....	0
Received during fiscal year ending June 30, 1910.....	1, 604
Answered during fiscal year ending June 30, 1910.....	1, 592
Remaining on hand June 30, 1910.....	12
Cases for board of medical examiners received and answered.....	599
Cases for retiring board received and answered.....	62
Reports of death received.....	420
Reports of medical survey received and acted upon.....	2, 777
Cases from Civil Service Commission received and answered.....	98
Cases of physical rejection, transfer of patients, and miscellaneous letters received and answered.....	4, 768

RECRUITING.

The following table shows the record of enlistments, rejections, and invaliding of recruits for the year 1909:

Where examined.	Examined.	Accepted.	Color-blind.	Rejected.
Receiving ships:				
Franklin, Norfolk, Va.....	532	267	10	255
Hancock, New York, N. Y.....	1, 131	765	26	340
Independence, Mare Island, Cal.....	459	328	3	128
Lancaster, Philadelphia, Pa.....	160	72	17	71
Philadelphia, Puget Sound, Wash.....	586	297	26	263
Southery, Portsmouth, N. H.....	18	18	0	0
Texas, Charleston, S. C.....	187	116	2	69
Wabash, Boston, Mass.....	266	229	3	34
Total.....	3, 339	2, 092	87	1, 160

Where examined.	Examined.	Accepted.	Color-blind.	Rejected.
Ships in commission:				
Alabama.....	6	6	0	0
Albany.....	9	9	0	0
Albatross.....	28	20	1	7
Birmingham.....	3	3	0	0
Buffalo.....	10	8	0	2
California.....	18	14	0	4
Castine.....	2	2	0	0
Celtic.....	1	1	0	0
Charleston.....	18	17	0	1
Chattanooga.....	7	7	0	0
Chester.....	3	2	0	1
Cheyenne.....	3	3	0	0
Chicago.....	1	1	0	0
Cleveland.....	1	1	0	0
Colorado.....	15	13	0	2
Connecticut.....	18	15	0	3
Culgoa.....	5	5	0	0
Denver.....	2	2	0	0
Dixie.....	3	2	0	1
Dolphin.....	12	10	0	2
Dubuque.....	6	5	0	1
Eagle.....	1	1	0	0
Fish Hawk.....	21	15	0	6
Galveston.....	7	6	0	1
Georgia.....	8	8	0	0
Glacier.....	2	2	0	0
Helena.....	29	28	0	1
Idaho.....	5	5	0	0
Illinois.....	3	3	0	0
Indiana.....	6	6	0	0
Kansas.....	6	6	0	0
Kearsarge.....	9	9	0	0
Kentucky.....	3	3	0	0
Louisiana.....	29	29	0	0
Maine.....	6	6	0	0
Marletta.....	1	1	0	0
Maryland.....	30	20	0	10
Mayflower.....	10	10	0	0
Milwaukee.....	63	42	1	20
Minnesota.....	4	4	0	0
Mississippi.....	18	16	0	2
Missouri.....	8	7	0	1
Mohican.....	77	69	0	8
Montana.....	3	2	0	1
Monterey.....	7	7	0	0
Montgomery.....	5	4	0	1
Nebraska.....	31	24	0	7
New Hampshire.....	8	5	2	1
New Jersey.....	8	8	0	0
New York.....	2	2	0	0
North Carolina.....	4	4	0	0
Ohio.....	24	23	0	1
Olympia.....	1	1	0	0
Panther.....	6	5	0	1
Pennsylvania.....	23	20	0	3
Prarie.....	5	5	0	0
Rainbow.....	12	11	0	1
Rhode Island.....	35	35	0	0
St. Louis.....	11	11	0	0
Salem.....	3	0	0	3
Scorpion.....	6	6	0	0
Solace.....	1	1	0	0
South Dakota.....	16	14	1	1
Supply.....	4	4	0	0
Tennessee.....	17	9	0	8
Torpedo Flotilla (Asiatic).....	3	3	0	0
Torpedo Flotilla (Atlantic).....	15	9	0	6
Torpedo Flotilla (Pacific).....	30	26	0	4
Vermont.....	2	2	0	0
Vicksburg.....	2	2	0	0
Villalobos.....	7	7	0	0
Virginia.....	25	23	0	2
Washington.....	9	6	0	3
West Virginia.....	28	24	0	4
Wilmington.....	17	17	0	0
Wisconsin.....	10	10	0	0
Yankton.....	2	2	0	0
Yorktown.....	6	5	1	0
Total.....	906	779	6	121

Where examined.	Examined.	Accepted.	Color-blind.	Rejected.	Recruits surveyed within four months for physical disability existing prior to enlistment.	
					Navy.	Marine Corps.
Shore stations:						
Canacao, P. I.	2	2	0	0		
Cavite, P. I.	481	400	2	79		
Charleston, S. C.	10	8	0	0	2	
Culebra	16	12	0	4		
Guam	30	25	2	3	2	
Guantanamo Bay, Cuba	9	9	0	0		
Honolulu, Hawaii	44	19	0	25	1	
Indian Head, Md.	2	2	0	0		
Key West, Fla.	26	19	0	7		
Las Animas, Colo.	1	1	0	0		
New Orleans, La.	15	9	0	6		
Newport, R. I. (Torpedo Station)	37	36	0	1		
Newport, R. I. (Training Station)	161	122	2	37	3	
Norfolk, Va.	58	33	1	24	2	
Panama	4	3	0	1		
Peking, China	5	5	0	0		
Pensacola, Fla.	76	25	3	48		
Philadelphia, Pa.	39	26	0	13		
Portsmouth, N. H.	151	91	4	66	7	
Puget Sound, Wash.	31	26	0	5	7	
San Juan, P. R.	13	11	0	2		
Sitka, Alaska	6	4	0	2		
Tutulla, Samoa	21	20	0	1		
Washington, D. C. (navy-yard)	522	247	13	262	4	
Washington, D. C. (Marine Barracks)	121	77	1	43		
Washington, D. C. (Mills Building)	8	5	0	3		
Yokohama	2	2	0	0		
Total.	1,891	1,239	30	622	28	
Navy and marine recruiting stations:						
Aberdeen, S. Dak.	14	6	0	8		
Amsterdam, N. Y.	2	1	0	1		
Anderson, Ind.	12	3	0	9		2
Annapolis, Md.	290	254	0	36	3	
Appleton, Wis.	9	2	1	6		
Atlanta, Ga.	243	103	10	130	4	1
Aurora, Ill.	3	2	0	1		
Baltimore, Md.	608	208	72	328	9	
Battle Creek, Mich.	20	11	0	9		
Bemidji, Minn.	26	16	0	10		2
Binghamton, N. Y.	79	27	2	50		
Birmingham, Ala.	213	96	11	106	7	
Bloomington, Ill.	4	1	0	3		
Boston, Mass.	1,662	653	40	969	20	3
Bridgeport, Conn.	3	2	0	1		
Bryan, Ohio	5	3	1	1		
Buffalo, N. Y.	555	181	16	358	8	12
Butler, Pa.	9	9	0	0		1
Cadillac, Mich.	19	13	0	6		
Chattanooga, Tenn.	758	389	26	343	5	
Chicago, Ill.	2,171	881	64	1,226	21	24
Cincinnati, Ohio	698	315	7	376	6	10
Clarion, Pa.	1	1	0	0		1
Clarksburg, W. Va.	12	10	0	2		2
Clearfield, Pa.	8	6	0	2		
Cleveland, Ohio	1,011	377	72	562	9	4
Columbus, Ohio	157	61	11	85		1
Cumberland, Md.	2	2	0	0		1
Dallas, Tex.	1,022	629	39	354	18	
Dayton, Ohio	146	61	12	73	5	
Defiance, Ohio	3	1	0	2		
Denver, Colo.	1,047	247	108	692	7	
Detroit, Mich.	652	237	27	388	13	
Du Bois, Pa.	7	5	0	2	1	
Duinoth, Minn.	53	28	0	25	1	
Dunkirk, N. Y.	10	5	0	5		
East Liverpool, Ohio	1	1	0	0		
Elk Garden, W. Va.	2	1	0	1		
Elmira, N. Y.	56	18	1	37		
Enid, Okla.	8	4	2	2		
Erie, Pa. (Wolverine)	251	101	10	140	1	
Flint, Mich.	8	3	0	5		

Where examined.	Examined.	Accepted.	Color-blind.	Rejected.	Recruits surveyed within four months for physical disability existing prior to enlistment.	
					Navy.	Marine Corps.
Navy and marine recruiting stations—Continued.						
Fort Worth, Tex.....	119	53	7	59	2	
Franklin, Pa.....	13	3	0	10		
Freedom, Pa.....	1	1	0	0		
Fresno, Cal.....	11	11	0	0		
Grafton, W. Va.....	7	7	0	0		1
Grand Rapids, Mich.....	150	94	2	54	5	2
Hamilton, Ohio.....	23	16	0	7		
Hartford, Conn.....	302	202	6	94		
Hastings, Nebr.....	2	2	0	0		
Houston, Tex.....	168	44	8	116		
Houtzdale, Pa.....	3	2	0	1		
Indianapolis, Ind.....	1,531	1,004	24	503	64	13
Jackson, Mich.....	3	2	0	1		
Jamestown, N. Y.....	17	9	0	8		
Joliet, Ill.....	7	4	0	3		
Kalamazoo, Mich.....	65	22	4	39	1	
Kansas City, Mo.....	1,364	381	41	942	9	4
Knoxville, Tenn.....	160	72	17	71	5	
La Crosse, Wis.....	12	4	0	8		
Lansing, Mich.....	12	7	0	5		
Lexington, Ky.....	1	1	0	0		
Lincoln, Nebr.....	86	61	1	24	2	
Los Angeles, Cal.....	715	290	22	403	12	
Louisville, Ky.....	188	74	19	95	1	
Madison, Wis.....	9	5	0	4		
Mankato, Minn.....	5	3	0	2		
Mare Island, Cal.....	50	47	0	3		
Marion, Ohio.....	14	3	0	11		1
Massillon, Ohio.....	2	0	0	2		
McKeesport, Pa.....	1	1	0	0		
Midvale, Pa.....	24	6	1	17		
Memphis, Tenn.....	74	30	0	44	1	
Meyersdale, Pa.....	2	2	0	0		
Mebigan (district).....	878	606	3	269		8
Middletown, Ohio.....	4	2	0	2		
Milwaukee, Wis.....	436	296	0	140	14	9
Mill Creek, W. Va.....	1	1	0	0		
Minneapolis, Minn.....	880	367	51	462	10	
Mount Pleasant, Pa.....	1	1	0	0		
Nashville, Tenn.....	210	93	2	115	3	
Newark, N. J.....	77	57	0	20		1
New Bethlehem, Pa.....	1	1	0	0		
New Orleans, La.....	1,731	496	48	1,187	16	
New York, N. Y.....	3,455	2,151	65	1,239	63	8
Oil City, Pa.....	6	2	0	4		
Oklahoma City, Okla.....	351	119	35	197	9	
Omaha, Nebr.....	526	204	16	246	12	
Peoria, Ill.....	77	42	1	34		3
Philadelphia, Pa.....	3,032	1,329	89	1,614	27	9
Pittsburg, Pa.....	1,274	531	74	669	9	24
Portland, Me.....	2	0	0	2		
Portland, Oreg.....	19	19	0	0		2
Providence, R. I.....	456	218	9	229		
Pueblo, Colo.....	71	34	0	37	4	
Racine, Wis.....	1	1	0	0		
Reading, Pa.....	113	46	5	62	1	
Recruiting party No. 2.....	9	4	0	5		
Richmond, Ind.....	1	0	0	1		
Riversville, W. Va.....	2	2	0	0		
Rochester, N. Y.....	212	106	3	100	4	4
Rockford, Ill.....	25	14	0	11		
Rock Island, Ill.....	113	47	1	65	1	3
Sacramento, Cal.....	43	37	0	6		1
Saginaw, Mich.....	117	53	4	60	2	
St. Louis, Mo.....	2,796	889	67	1,840	20	13
St. Paul, Minn.....	25	18	0	7		
San Antonio, Tex.....	237	97	11	129		
San Francisco, Cal.....	1,077	582	14	481	2	4
Scranton, Pa.....	39	8	0	31		
Seattle, Wash.....	164	102	0	62		
Sharon, Pa.....	31	7	0	24		
Shawnee, Okla.....	7	1	3	3		
Sioux City, Iowa.....	109	60	6	43	2	
South Bend, Ind.....	28	8	1	19		

Where examined.	Examined.	Accepted.	Color-blind.	Rejected.	Recruits surveyed within four months for physical disability existing prior to enlistment.	
					Navy.	Marine Corps.
Navy and marine recruiting stations—Continued.						
Springfield, Ill.	85	49	0	36		1
Stockton, Cal.	14	12	0	2		
Sunbury, Pa.	37	12	0	25		
Syracuse, N. Y.	243	133	3	107	4	12
Thomas, W. Va.	1	1	0	0		
Tiffin, Ohio.	5	1	1	3		
Tionesta, Pa.	6	5	0	1		
Toledo, Ohio.	194	104	4	86	4	41
Troy, N. Y.	94	61	0	43		1
Wampum, Pa.	1	1	0	0		
Warren, Ohio.	12	1	0	11		
Wheeling, W. Va.	75	73	0	2	2	4
Wichita, Kans.	123	40	2	81	2	
Wilkes-Barre, Pa.	28	10	2	16		
Williamsport, Pa.	21	8	0	13		
Wilmington, Del.	82	17	6	59		2
Winona, Minn.	7	6	0	1		
Worcester, Mass.	20	19	0	1		
Youngstown, Ohio.	71	39	0	32	2	3
Zanesville, Ohio.	20	7	1	12	1	
Total	36,777	16,737	1,211	18,829	444	238
Receiving ships.	3,339	2,092	87	1,160		
Ships in commission.	906	779	6	121		
Shore stations.	1,891	1,239	30	622	28	
Navy and marine recruiting stations.	36,777	16,737	1,211	18,829	444	238
Grand total	42,913	20,847	1,334	20,732	472	238

RECRUITING SUMMARY.

Examined	42,913
Rejected per 1,000 color-blind	31.08
Rejected per 1,000 for all causes	514.20
First examination	36,894

INSANE OF THE NAVY.

Patients from the Navy and Marine Corps in the Government Hospital for the Insane on June 30, 1909	222
Admitted during the fiscal year ending June 30, 1910	76
Total	298
Discharged during the fiscal year ending June 30, 1910 (17 recovered, 2 improved, 16 died, 4 not insane, 10 eloped, 3 unimproved)	52
Remaining in this institution June 30, 1910	246
Patients from the Navy and Marine Corps in the Mendocino State Hospital for the Insane on June 30, 1909	20
Admitted during fiscal year ending June 30, 1910	25
Total	45
Discharged during the fiscal year ending June 30, 1910 (18 to Government Hospital for Insane, Washington, D. C., 10 from treatment (improved); 3 from service (expiration of enlistment; still remaining); 1 died, 2 eloped)	31
Remaining in this institution June 30, 1910	14
Patients under treatment in both institutions June 30, 1910	260

STATISTICAL CLASSIFICATION.

The following subdivisions summarize the data embraced in the several statistical tables of this report:

1. General view of the effects of disease and injury on the Navy and Marine Corps during the year 1909.
2. *Atlantic Station*.—Names of ships, average complements corrected for time, admissions and readmissions for disease and injury, sick days, daily average of patients, transfers to hospitals, discharges from the service, and deaths on each ship for the year 1909.
3. *Pacific Station*.—Names of ships, average complements corrected for time, admissions and readmissions for disease and injury, sick days, daily average of patients, transfers to hospitals, discharges from the service, and deaths on each ship for the year 1909.
4. *Asiatic Station*.—Names of ships, average complements corrected for time, admissions and readmissions for disease and injury, sick days, daily average of patients, transfers to hospitals, discharges from the service, and deaths on each ship for the year 1909.
5. *Receiving ships and station ships*.—Names of ships, average complements, admissions and readmissions for disease and injury, sick days, average of patients, transfers to hospitals, discharges from the service, and deaths on each ship for the year 1909.
6. *Navy-yards, marine barracks, and other shore stations*.—Names, average complements, admissions and readmissions for disease and injury, sick days, daily average of patients, transfers to hospitals, discharges from the service, and deaths during the year 1909.
7. *Force afloat*.—General aggregate, 1909.
8. *Force afloat*.—Detailed statement, 1909.
9. *Navy-yards, marine barracks, receiving ships, station ships, and other shore stations*.—General aggregate, 1909.
10. *Navy-yards, marine barracks, receiving ships, station ships, and other shore stations*.—Detailed statement, 1909.
11. *Naval hospitals and hospital ships*.—General aggregate, 1909.
12. *Naval hospitals and hospital ships*.—Detailed statement, 1909.
13. Report of vaccination for the year 1909.
14. *Prevalence of special diseases (relation by scale)*.—For the year 1909.
15. Mortuary record for the year 1909.
16. *Deaths in the Navy and Marine Corps (relation by scale)*.—During the year 1909.
17. *Entire service*.—General aggregate 1909 (combination of tables 7, 9, and 11.)
18. *Entire service*.—Detailed statement 1909 (combination of tables 8, 10 and 12).
19. Table showing distribution of disease among occupational groups of the personnel for 1909 by admission, admission rates, sick days and computed damage.
20. Table showing ships which had infectious and contagious disease on board during 1909 and the character and number of such.
21. Table showing discharges from the Navy and Marine Corps for physical disability during 1909—relation by scale.
22. Surgical operations for the calendar year ending December 31, 1909.

The following tables have been compiled from the most reliable data available and are published for the preservation of records and to satisfy frequent inquiries:

- A. Table showing, as nearly as possible, the average strength of the Navy and Marine Corps, including officers and enlisted men, total number of deaths with death rate per thousand, for each year from 1850 to 1909, inclusive.
- B. Table showing total number of officers in the Navy and Marine Corps on the active list (including midshipmen), total number of deaths, and death rate annually for thirty-one years, 1879 to 1909, both inclusive.
- C. Table showing the total number of deaths in the Navy and Marine Corps during the Civil War.

1. *General view of the effects of disease and injury on the Navy and Marine Corps during the year 1909.*

Average strength of the Navy and Marine Corps ^a	57,172
Average strength shown by reports of medical department ^b	55,550
Average strength of the force afloat ^c	34,688
Admissions and readmissions for disease ashore and afloat ^d	44,289
Ratio per 1,000 of strength.....	797.28
Ratio per 1,000 for the year 1908.....	611.05
Ratio per 1,000 for ten years (1898-1907).....	648.38
Admissions and readmissions for injuries, ashore and afloat ^d	6,642
Ratio per 1,000 of strength.....	119.56
Ratio per 1,000 for the year 1908.....	114.31
Ratio per 1,000 for ten years (1898-1907).....	126.59
Total admissions and readmissions to sick list during the year ^d	50,931
Ratio per 1,000 of strength.....	916.85
Ratio per 1,000 for the year 1908.....	725.36
Ratio per 1,000 for ten years (1898-1907).....	775.95
Daily average of patients ^d	1,451.74
Ratio per 1,000 of strength.....	26.13
Ratio per 1,000 for the year 1908.....	29.13
Ratio per 1,000 for ten years (1898-1907).....	32.83
Total number of sick days ^d	529,886
Average for each man of the Navy and Marine Corps.....	9.53
Average for the year 1908.....	10.66
Average for ten years (1898-1907).....	11.82
Average days for each case treated.....	10.44
Average for the year 1908.....	14.69
Average for ten years (1898-1907).....	15.00
Discharges from the service for disease ^d	1,341
Ratio per 1,000 of strength.....	23.45
Ratio per 1,000 for the year 1908.....	27.59
Ratio per 1,000 for ten years (1898-1907).....	29.63
Discharges from the service for injuries ^d	235
Ratio per 1,000 of strength.....	4.11
Ratio per 1,000 for the year 1908.....	7.89
Ratio per 1,000 for ten years (1898-1907).....	5.10
Total discharges for disability ^d	1,576
Ratio per 1,000 of strength.....	27.56
Ratio per 1,000 for the year 1908.....	35.49
Ratio per 1,000 for ten years (1898-1907).....	32.72
Deaths from disease ^d	135
Ratio per 1,000 of strength.....	2.36
Ratio per 1,000 for the year 1908.....	3.53
Ratio per 1,000 for ten years (1898-1907).....	4.05
Deaths from injury (including poisons) ^d	109
Ratio per 1,000 of strength.....	1.90
Ratio per 1,000 for the year 1908.....	2.09
Ratio per 1,000 for ten years (1898-1907).....	2.57
Total deaths from all causes ^e	286
Ratio per 1,000 of strength.....	5.00
Ratio per 1,000 for the year 1908.....	5.76
Ratio per 1,000 for ten years (1898-1907).....	6.62
Total damage in percentage of sick from all injuries and poisons, 1909.....	.667
Average damage for ten years, 1895-1905, excluding 1898 (war year).....	.786
Total damage in percentage of sick from all diseases, 1909.....	3.952
Average damage for ten years, 1895-1905, excluding 1898 (war year).....	4.395
Grand total damage in percentage of sick, 1909.....	4.619
Average grand total damage for ten years, 1895-1905, excluding 1898 (war year).....	5.218

^a Used in computing ratios of death and discharges from the service for disability.

^b Used in computing all ratios except those of deaths and discharges from the service for disability.

^c Exclusive of hospital ships, receiving ships and station ships.

^d Exclusive of Naval Sanatorium for Tuberculosis, Las Animas, Colo.

^e Includes 42 deaths additional to those reported in the following statistical tables: Twenty-seven at Naval Sanatorium, Las Animas, Colo.; 1 Government Hospital for Insane; and 14 occurring elsewhere.

Average complements corrected for time, admissions for disease and injury, sick days, daily average of patients, transfers to hospital, discharges from the service, deaths and admission rate per 1,000 for primary venereal infection on each ship for the year 1909.

2. ATLANTIC STATION.

Name of ship.	Period in commission.	Average complements corrected for time.			Admissions and readmissions.			Admission rate per 1,000 of strength.	Sick days.	Daily average of patients.	Ratio per 1,000 of force sick daily.	Transferred to hospital.	Invalided from service.	Deaths.	Admission rate per 1,000 for primary venereal infections.
		Discharge.	Injury.	Total.	Discharge.	Injury.	Total.								
Alabama.....	229 days..	69	28	3	31	449.27	66	0.28	4.05	15	.....	.....	.....	130.43
Alliance.....	Year.....	101	49	19	68	673.26	435	1.19	11.78	4	.....	.....	.....	99.10
Birmingham.....	do.....	347	153	45	198	570.60	1,479	4.05	11.67	30	.....	.....	.....	155.02
Castine.....	do.....	152	133	36	168	1,105.26	654	1.79	11.77	42	.....	.....	.....	210.53
Celtic.....	do.....	141	146	9	155	1,099.29	637	1.74	12.34	23	.....	.....	.....	276.59
Chester.....	107 days..	356	299	64	363	1,019.66	2,083	5.70	16.01	22	.....	.....	.....	215.48
Chicago.....	Year.....	122	39	11	50	400.83	160	1.49	12.21	14	.....	.....	.....	114.75
Connecticut.....	Year.....	891	654	106	769	852.97	3,294	9.02	10.12	73	.....	.....	.....	250.28
Caluga.....	do.....	121	111	19	127	1,049.65	528	1.44	11.90	25	.....	.....	.....	239.68
Des Moines.....	do.....	299	368	47	415	1,542.75	1,154	4.79	17.80	41	.....	.....	.....	297.39
Dolphin.....	333 days..	203	178	34	212	1,044.33	903	2.71	13.34	24	.....	.....	.....	206.89
Dixie.....	Year.....	167	90	32	122	730.53	302	1.82	4.91	39	.....	.....	.....	221.56
Dubuque.....	do.....	169	164	33	197	1,165.68	1,020	2.79	16.50	13	.....	.....	.....	100.59
Eagle.....	do.....	73	36	6	42	575.34	256	7.70	9.58	12	.....	.....	.....	109.68
Fish Hawk.....	do.....	41	24	7	31	756.14	257	7.70	10.77	7	.....	.....	.....	146.34
Georgia.....	do.....	819	387	50	387	472.52	2,875	7.87	9.60	56	.....	.....	.....	174.60
Hartford.....	104 days..	46	57	14	71	1,543.47	302	2.90	63.04	10	.....	.....	.....	369.56
Hist.....	Year.....	57	64	12	76	1,333.33	222	6.10	10.52	15	.....	.....	.....	368.42
Idaho.....	do.....	766	351	64	415	541.77	2,293	6.28	8.19	50	.....	.....	.....	180.29
Illinois.....	216 days..	216	88	19	107	465.37	619	2.82	13.05	9	.....	.....	.....	111.11
Indiana.....	201 days..	160	111	10	121	756.25	631	2.41	15.06	14	.....	.....	.....	350.00
Kansas.....	Year.....	839	577	60	637	767.47	3,630	9.67	11.66	45	.....	.....	.....	192.77
Kearsarge.....	247 days..	274	88	3	91	335.76	682	2.76	10.07	12	.....	.....	.....	131.39
Kentucky.....	240 days..	289	70	17	87	310.71	816	3.40	12.14	22	.....	.....	.....	89.28
Louisiana.....	Year.....	847	337	78	415	489.84	3,183	8.72	10.29	41	.....	.....	.....	109.94
Maine.....	243 days..	458	318	67	385	840.61	2,131	8.76	19.12	37	.....	.....	.....	157.20
Marietta.....	Year.....	164	149	62	211	1,286.52	1,374	3.76	22.92	22	.....	.....	.....	176.83
Mayflower.....	do.....	175	105	10	115	687.14	339	4.92	5.25	46	.....	.....	.....	234.28
Minnesota.....	do.....	588	371	54	425	478.69	1,634	4.47	5.03	74	.....	.....	.....	164.07
Mississippi.....	do.....	753	310	65	375	496.68	3,983	10.91	14.45	31	.....	.....	.....	147.03
Missouri.....	do.....	735	395	56	451	613.69	1,711	4.68	6.36	92	.....	.....	.....	254.13
Montana.....	do.....	919	478	76	534	608.79	5,330	10.50	11.63	65	.....	.....	.....	135.17
Montgomery.....	do.....	152	98	17	115	751.63	433	1.18	7.71	20	.....	.....	.....	189.54
Nebraska.....	do.....	810	523	68	591	729.62	2,769	7.67	9.34	52	.....	.....	.....	148.15
New Hampshire.....	do.....	888	391	108	499	561.22	2,808	7.69	8.65	49	.....	.....	.....	100.22
New Jersey.....	do.....	817	498	90	588	719.72	2,774	7.60	9.30	164	.....	.....	.....	85.67
New York.....	231 days..	315	219	40	259	822.22	1,440	6.27	12.90	53	.....	.....	.....	212.69
North Carolina.....	Year.....	908	426	81	507	358.37	2,385	6.53	7.19	68	.....	.....	.....	156.38
Ohio.....	353 days..	675	304	57	361	534.81	1,473	4.17	6.17	93	.....	.....	.....	118.52
Olympia.....	106 days..	149	67	10	77	550.09	326	3.07	21.92	16	.....	.....	.....	179.24
Paducah.....	Year.....	150	133	20	153	1,020.09	609	1.12	7.46	23	.....	.....	.....	200.00
Panther.....	do.....	186	195	40	235	1,263.41	944	2.58	13.87	28	.....	.....	.....	311.88
Pringle.....	do.....	265	82	14	96	325.42	430	1.17	3.96	31	.....	.....	.....	47.78
Puritan.....	do.....	28	10	.....	10	357.12	32	.....	2.85	4	.....	.....	.....	107.10
Rhode Island.....	do.....	806	581	82	663	822.58	3,846	10.53	13.06	91	.....	.....	.....	141.43
Salem.....	do.....	352	277	71	348	988.63	1,365	3.92	11.13	51	.....	.....	.....	196.02
Scorpion.....	do.....	97	37	5	42	432.26	313	.....	8.76	2	.....	.....	.....	123.71
Solace.....	104 days..	40	18	2	20	500.00	218	2.09	62.25	2	.....	.....	.....	125.00
Tacoma.....	Year.....	276	245	43	288	1,066.66	2,301	6.30	23.33	31	.....	.....	.....	214.81
Tonapah.....	107 days..	47	54	20	74	1,574.46	165	1.54	32.76	13	.....	.....	.....	446.07
Torpedo Flotilla:															
Atlantic.....	Year.....	366	90	20	110	300.51	322	.....	2.40	37	.....	.....	.....	112.02
Reserve.....	30 days..	45	32	10	42	933.33	72	2.40	53.33	5	.....	.....	.....	333.34
Seventh Division.....	138 days..	33	17	6	23	603.90	56	4.11	12.42	4	.....	.....	.....	.....
Vermont.....	Year.....	843	785	161	947	1,123.36	4,982	13.64	16.18	78	.....	.....	.....	253.85
Virginia.....	do.....	793	515	63	581	732.66	2,735	7.49	9.44	78	.....	.....	.....	185.37
Wisconsin.....	do.....	693	518	110	628	906.29	3,882	3.03	15.35	53	.....	.....	.....	77.89
Wolverine.....	do.....	90	85	18	103	1,144.44	1,107	3.03	33.66	4	.....	.....	.....	122.22
Yankee.....	15 days..	11	7	.....	7	630.36	7	46	41.81	2	.....	.....	.....	454.54
Yankton.....	Year.....	99	84	17	101	1,020.20	538	1.47	14.81	27	.....	.....	.....	171.72

Average complements corrected for time, admissions for disease and injury, sick days, daily average of patients, transfers to hospital, etc.—Continued.

3. PACIFIC STATION.

Name of ship.	Period in commission.	Average complements corrected for time.	Admissions and readmissions.			Admission rate per 1,000 of strength.	Sick days.	Daily average of patients.	Ratio per 1,000 of force sick daily.	Transferred to hospital.	Invalided from service.	Deaths.	Admission rate per 1,000 for primary venereal infections.
			Disease.	Injury.	Total.								
Albany.....	Year.....	327	335	54	389	1,189.60	1,857	5.08	15.53	49	2	1	281.24
Arethusa.....	273 days.....	65	45	4	49	753.69	153	5.76	8.61	8	.....	.....	184.61
Buffalo.....	Year.....	326	310	52	362	1,110.42	2,094	5.73	17.57	113	.....	1	251.54
California.....	do.....	806	365	39	404	501.24	3,292	9.01	11.17	38	1	.....	108.51
Cheyenne.....	317 days.....	142	71	19	90	633.80	335	1.05	7.39	20	.....	.....	225.35
Colorado.....	Year.....	836	522	116	638	761.96	3,188	8.73	10.44	37	3	4	226.08
Glacier.....	do.....	135	100	31	131	970.37	632	1.73	12.88	10	.....	.....	237.04
Iris.....	78 days.....	24	27	7	34	1,416.66	114	1.46	60.83	8	.....	.....	416.66
Maryland.....	Year.....	855	354	80	443	518.12	3,011	8.24	9.63	46	.....	1	95.91
Milwaukee.....	do.....	190	101	19	120	631.57	529	1.44	7.57	27	.....	2	252.63
New Orleans.....	46 days.....	42	15	1	16	380.95	30	6.65	15.47	7	.....	.....	166.67
Pennsylvania.....	Year.....	822	351	98	449	546.22	3,209	8.79	10.69	68	1	4	87.59
South Dakota.....	do.....	822	283	41	324	394.16	2,323	6.36	7.73	58	.....	1	62.04
St. Louis.....	do.....	406	167	25	192	472.90	832	2.37	5.59	18	3	.....	123.15
Supply.....	do.....	130	128	30	158	1,215.38	735	2.01	15.46	28	.....	.....	230.77
Tennessee.....	do.....	922	501	99	600	644.25	2,664	7.29	7.90	57	3	3	131.23
Torpedo Flotilla (Pacific).....	do.....	720	183	56	239	331.94	631	1.72	2.38	114	.....	2	61.11
Vicksburg.....	229 days.....	91	58	9	67	736.26	313	1.36	14.94	5	.....	.....	164.83
Washington.....	Year.....	881	394	101	495	561.86	2,908	7.96	9.90	29	.....	1	115.78
West Virginia.....	do.....	843	476	55	531	629.89	3,153	8.63	10.23	41	2	3	147.09
Yorktown.....	do.....	178	96	9	105	589.88	609	1.66	9.32	12	3	.....	235.95

4. ASIATIC STATION.

Albatross.....	Year.....	79	71	12	83	1,037.97	395	1.08	13.67	7	.....	1	215.19
Arayat.....	332 days.....	32	19	8	27	843.78	271	.81	25.31	8	.....	.....	120.48
Caliso.....	Year.....	37	30	2	32	864.86	196	5.53	14.32	3	.....	.....	189.18
Charleston.....	do.....	789	732	98	830	1,034.22	4,364	11.95	15.14	101	1	.....	231.93
Chattanooga.....	do.....	320	105	20	125	578.12	1,179	3.22	10.06	17	.....	.....	175.00
Cleveland.....	do.....	281	221	55	276	967.96	1,981	5.42	19.28	31	.....	.....	230.64
Concord.....	308 days.....	96	67	12	79	812.90	458	1.48	15.41	18	.....	1	229.17
Denver.....	Year.....	302	343	60	403	1,331.12	2,184	5.98	19.80	13	.....	2	231.85
Galveston.....	do.....	301	196	31	227	750.83	1,197	3.27	10.86	14	.....	1	196.01
Helena.....	do.....	208	188	36	224	1,067.30	1,428	3.90	18.75	8	.....	2	365.38
Mindoro.....	245 days.....	22	16	1	17	772.72	100	.....	18.18	4	.....	.....	90.90
Monadnock.....	69 days.....	20	12	5	17	750.00	81	1.17	68.50	4	.....	.....	.....
Monterey.....	341 days.....	208	306	90	396	1,903.83	1,680	4.63	22.25	72	.....	1	235.57
Paragua.....	332 days.....	22	10	2	12	545.45	195	5.8	26.39	2	.....	.....	181.81
Rainbow.....	Year.....	223	155	24	179	798.29	771	2.11	9.46	31	.....	1	251.12
Samar.....	do.....	31	28	4	32	1,032.25	150	.41	13.22	.....	.....	.....	645.16
Torpedo Flotilla (Asiatic).....	do.....	302	193	18	211	698.67	340	.93	3.67	60	.....	1	307.94
Villalobos.....	do.....	62	81	7	88	1,403.22	557	1.82	24.51	9	.....	.....	661.29
Wilmington.....	do.....	211	257	23	280	1,312.79	1,529	4.18	19.81	8	.....	3	554.50

5. RECEIVING SHIPS AND STATION SHIPS.

Franklin.....	Year.....	1,770	1,310	118	1,428	806.21	4,630	12.68	7.16	471	163	1	293.78
Hancock.....	do.....	1,033	411	45	456	435.62	1,346	3.68	3.56	253	12	2	138.43
Independence.....	do.....	938	375	42	417	442.39	1,117	3.06	3.26	189	43	2	94.78
Lancaster.....	do.....	637	426	39	465	708.00	2,215	6.06	9.51	59	20	2	335.10
Mohican.....	do.....	189	136	12	148	783.06	294	8.00	4.23	93	.....	.....	100.53
Philadelphia.....	do.....	365	158	14	172	465.75	760	2.09	5.72	53	9	.....	104.11
Southey and Topeka.....	do.....	533	96	11	107	191.36	1,888	3.83	7.12	22	1	2	41.99
Texas.....	do.....	389	243	29	272	694.08	2,182	5.97	15.34	34	3	1	185.08
Wabash.....	do.....	550	256	28	284	512.72	466	1.27	2.30	198	14	.....	127.27

Average complements corrected for time, admissions for disease and injury, sick days, daily average of patients, transfers to hospital, etc.—Continued.

6. NAVY-YARDS, MARINE BARRACKS, AND OTHER SHORE STATIONS.

Location.	Periods in commission.	Average complements corrected for time.	Admissions and readmissions.			Admission rate per 1,000 of strength.	Sick days.	Daily average of patients.	Rate per 1,000 of force sick daily.	Transferred to hospital.	Invalided from service.	Deaths.	Admission rate per 1,000 for primary venereal infections.
			Disease.	Injury.	Total.								
Navy-yards:													
Boston.....	Year.....	493	252	28	280	604.79	680	1.81	3.91	139	4	.....	142.55
Cavite.....	do.....	796	460	56	516	648.24	1,910	5.23	6.57	117	4	.....	59.04
Charleston.....	do.....	124	142	14	156	1,258.06	2,780	7.62	61.45	8	3	.....	130.97
Mare Island.....	do.....	643	284	51	335	520.99	508	1.39	2.16	210	24	.....	21.77
New York.....	do.....	495	310	69	379	765.65	1,695	4.65	9.39	65	6	.....	74.75
Norfolk.....	do.....	473	248	34	282	596.19	1,197	3.27	6.91	60	30	.....	167.02
Pensacola.....	do.....	157	48	12	60	382.16	241	.66	4.20	11	.....	70.06	
Philadelphia.....	do.....	353	582	67	649	1,838.52	3,242	8.88	25.12	31	55	.....	470.03
Portsmouth.....	do.....	174	178	53	237	1,362.07	800	2.35	13.50	55	16	.....	206.89
Port Royal.....	do.....	338	216	41	257	700.35	1,345	3.68	10.88	77	12	.....	180.47
Puget Sound.....	do.....	215	132	16	148	688.37	151	.41	1.90	78	5	.....	251.16
Washington.....	do.....	372	182	33	215	577.96	386	1.05	2.82	111	3	.....	120.90
Marine barracks and camps:													
Cuba—													
Habana.....	27 days.....	26	11	6	17	653.84	73	2.70	10.00	6	.....	.....	.....
Santo Domingo	10 days.....	4	3	2	5	1,250.00	21	2.10	5.70	2	.....	.....	.....
Culebra.....	Year.....	51	30	9	39	764.70	387	1.06	20.79	1	.....	.....	137.25
Panama, Camp Elliott.	do.....	397	378	67	445	1,120.00	2,938	8.03	20.28	8	.....	6	156.17
Peking, legation guard.	do.....	142	91	17	108	700.56	1,549	4.23	29.79	3	.....	.....	225.35
Washington headquarters.	do.....	345	433	95	528	1,530.43	1,500	4.11	11.91	178	24	4	147.83
Nicaragua expedition—													
First regiment.	49 days.....	102	117	11	128	1,254.90	243	4.95	48.52	11	.....	.....	656.86
Second regiment.													
Naval stations:													
Academy.....	Year.....	1,400	1,838	227	2,065	1,475.00	6,489	17.77	12.69	451	17	2	119.29
Great Lakes.....	do.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Guam.....	do.....	200	183	31	214	915.00	2,715	7.43	27.15	15	5	.....	105.00
Guantanamo (Newark).	do.....	263	243	30	273	1,038.02	1,810	4.95	18.82	40	.....	.....	152.09
Hawaii (Honolulu).....	do.....	448	242	39	281	627.23	4,288	11.74	26.20	28	.....	1	145.09
Indian Head.....	do.....	13	3	2	5	384.61	26	.07	5.37	2	.....	.....	.....
Iona Island.....	do.....	17	4	1	5	294.11	9	.02	1.17	.....	.....	.....	.....
Key West.....	do.....	103	43	6	49	475.72	535	1.47	14.27	.....	.....	.....	106.80
Newport Torpedo Station.	do.....	216	65	17	82	379.62	373	.74	3.42	14	.....	.....	23.10
Newport Training Station.	do.....	1,891	1,219	176	1,385	732.41	4,060	11.12	5.88	752	108	.....	62.40
New Orleans.....	do.....	87	47	7	54	620.68	369	1.01	11.00	4	.....	1	114.94
Olongapo.....	do.....	925	1,312	97	1,409	152.32	4,621	12.66	13.68	504	.....	.....	135.13
Polloc.....	9 days.....	.....	.....	1	1	.....	3	.33	.....	.....	.....	.....	.....
Portsmouth Naval Prison.	Year.....	327	117	23	140	428.13	1,696	4.64	14.19	21	9	2	33.63
Powder Depot.....	do.....	28	12	6	18	642.86	112	.30	10.71	1	.....	.....	35.71
Samoa (Annapolis).	do.....	166	129	27	156	939.75	1,399	3.83	23.07	.....	1	2	30.12
San Francisco Training Station.	do.....	1,222	1,176	70	1,246	1,019.64	13,835	37.90	31.01	15	91	6	104.75
San Juan.....	do.....	173	146	41	187	1,080.92	566	1.55	8.95	59	.....	.....	115.61
Special duty:													
Medical School Dispensary.	do.....	38	3	41	.....	.....	171	.46	.....	12	.....	.....	.....
New York.....	do.....	7	.....	7	.....	.....	95	.26	.....	2	.....	.....	1
Philadelphia.....	do.....	21	3	24	.....	.....	221	.60	.....	6	.....	.....	.....
San Francisco Recruiting Station.	92 days.....	11	4	4	.....	.....	12	.53	.....	.....	.....	.....	.....
Washington Dispensary.	Year.....	41	8	49	.....	.....	194	.53	.....	26	.....	.....	.....

7. General aggregate, 1909.

FORCE AFLOAT, EXCLUSIVE OF HOSPITAL SHIPS, RECEIVING SHIPS, AND STATION SHIPS.

Classification of diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.					Died.	Continued to next year.	Total number of sick days.
					To hospital.	From service.	On leave.	To Hospital for Insane.	Deserted.			
CLASS I.												
Parasitic infections (animal).....		19	4	22	1							73
CLASS II.												
General infective diseases.....	47	2,423	193	1,776	839					10	38	15,592
CLASS III.												
Constitutional disorders of nutrition:												
Subsidiary class 1.—General diseases of nutrition.....		7	1	2	6							32
Subsidiary class 2.—Diseases of the blood.....		15		11	4							96
Subsidiary class 3.—Diseases of the ductless glands.....		2		1	1							2
CLASS IV.												
Diseases of the nervous system.....	11	533	74	404	193	14	2	2		2	1	3,274
CLASS V.												
Diseases of the visual apparatus.....	5	322	32	261	90	1			1		6	1,979
CLASS VI.												
Diseases of the auditory apparatus.....		258	33	214	71	3					3	1,091
CLASS VII.												
Diseases of the olfactory apparatus.....	1	81	5	74	13							310
CLASS VIII.												
Diseases of the nutritive apparatus:												
Subsidiary class 1.—Diseases of the digestive system.....	43	4,174	180	3,950	402	1					44	18,119
Subsidiary class 2.—Diseases of the circulatory system.....	11	283	54	214	112	6			8		8	2,901
Subsidiary class 3.—Diseases of the respiratory system.....	11	743	52	665	126	3			1		11	4,660
CLASS IX.												
Diseases of the organs of locomotion.....	9	474	47	417	97	6					10	3,248
CLASS X.												
Diseases of the skin and connective tissue.....	46	1,898	88	1,871	136	2				1	22	12,968
CLASS XI.												
Veneral diseases.....	50	7,404	731	7,453	653	12					67	37,781
CLASS XII.												
Diseases of the genito-urinary apparatus.....	15	483	37	351	144	4				3	3	3,780
CLASS XIII.												
Cysts and new growths.....		47	3	31	19							246
CLASS XIV.												
Injuries.....	69	3,291	141	3,020	358	7	1			55	59	26,089
CLASS XV.												
Extraneous bodies.....		22		21	1							5
CLASS XVI.												
Poisons.....	3	274	17	248	35	2				8	1	1,005
CLASS XVII.												
Feigned diseases.....		3		3								9
Total.....	321	22,756	1,692	21,039	3,301	61	3	2	2	88	273	133,940

8. Detailed statement, 1909.

FORCE AFLOAT, EXCLUSIVE OF HOSPITAL SHIPS, RECEIVING SHIPS, AND STATION SHIPS.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.				Continued to next year.	Total number of sick days.
					To hospital.	From service.	On leave.	To Hospital for In- crease.		
CLASS I:										
<i>Parasitic infections (animal)—</i>										
Ankylostomiasis		2		2						3
Ascariasis		5		4	1					24
Teniasis		11	4	15						37
Other diseases of this class		1		1						9
CLASS II:										
<i>General infective diseases (non-venereal)—</i>										
Catarrhus epidemicus	3	666	15	659	15				10	2,815
Denguis		52	1	52	1					237
Diphtheria		4	1	2	3					42
Dysentery amœbica		11	5	7	7				2	116
Dysentery (undefined)		7		6						82
Dysentery (bacillary)		26	3	23	5			1		217
Enteritis flagellata		2	5	6	1				1	32
Enteritis infectiva		1		1	1					2
Erysipelas		11		8	2			1		90
Febris cerebro-spinalis		1			1					
Febris pneumonica	4	110	2	54	54			4	4	1,153
Febris recurrens	2	10		10	2					27
Febris rheumatica	9	181	33	156	61				6	1,936
Febris typhoides	1	115	7	22	99			2		1,045
<i>Malaria—</i>										
(a) Cachexia malarialis		11	1	9	3					102
(b) Febris mistivo-autumnalis		23	2	22	3					98
(d) Febris tertiana	1	10	2	13						69
(e) Febris quartana	3	234	58	268	22				5	1,256
Morbilli	1	147	1	30	119					514
Paralysis ascendens acuta		1			1					11
Parotiditis epidemica	10	233	5	94	154					1,115
Pertussis		1		1						31
Pyrexia ortus incerti		155	3	140	16				2	855
Rheumatismus articularis chronicus	6	104	20	89	40				1	1,162
Rubella		67		3	64					298
Scarlatina		20		4	16					179
Septicæmia	1	2	2	2	3					51
Tuberculosis miliaris acuta		7			6					103
Tuberculosis pneumonica	4	115	25	20	122			1		1,389
Tuberculosis of other parts	1	5	1	1	4				2	34
Vaccinia		68		66	3				2	312
Varicella		5		2	3					16
Variola		7		1	5			1		51
Other diseases of this class	1	11	1	6	6				1	163
CLASS III.—CONSTITUTIONAL DISORDERS OF NUTRITION:										
<i>Subsidiary class 1.—General diseases of nutrition—</i>										
Diabetes insipidus		1			1					1
Diabetes mellitus		2	1	1	2					30
Lithæmia		1			1					
Purpura		1			1					
Other diseases of this class		2		1	1					1
<i>Subsidiary class 2.—Diseases of the blood—</i>										
Anæmia simplex		15		11	4					96
<i>Subsidiary class 3.—Diseases of the ductless glands—</i>										
Bronchocele		2		1	1					2
CLASS IV:										
<i>Diseases of the nervous system—</i>										
Apoplexia		1						1		1
Aphasia		1		1						4
Cephalalgia		28	4	28	4					152

8. Detailed statement, 1909—Continued.

FORCE AFLOAT, EXCLUSIVE OF HOSPITAL SHIPS, RECEIVING SHIPS, AND STATION SHIPS—Continued.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.					Continued to next year.	Total number of sick days.	
					To hospital.	From service.	On leave, To Hospital for In- name.	Deserted.	Died.			
CLASS IV—Continued.												
<i>Diseases of the nervous system—Continued.</i>												
Cerebellaris, hemorrhagia		1								1		1
Dementia		33	5	5	30	1		2				339
Epilepsia		24	13	16	21	4						299
Febris thermica		27		27								117
Hemiplegia	1	2		2								10
Hemiplegia		5		3	3							68
Insomnia		3	1	3			1					18
Mania	1	6	2	3							1	141
Melancholia	2	26	4	10	22							278
Meningitis		1		1								29
Monoplegia		1	3	1	3							30
Nausea marina	1	44	18	53	5	5						132
Neuralgia		63	2	59	6							263
Neurasthenia		71	7	26	48	3	1					432
Neuritis	2	18	4	11	13		1					265
Neuritis multiplex		1	1		2							4
Paralysis agitans		1			1							2
Paralysis insanorum generalis		1			1							1
Paranoia		4	1		5							3
Paraplegia		1			1							1
Prostratio thermica	2	100	4	104	2							238
Sciatica		15		11	4							166
Sclerosis spinalis posterior		3			3							2
Torticollis spasmodica		2		2								7
Vertigo	1	23	1	20	5							79
Other diseases of this class	1	23	4	18	9	1						181
CLASS V:												
<i>Diseases of the visual apparatus—</i>												
Amaurosis		1		1								4
Amblyopia		5	1	1	5							12
Asthenopia		10	4	6	8							95
Astigmatismus		9		3	9							33
Blepharitis		3		3								7
Cataracta		4	2	3	3							68
Chalazion		1	1	2								2
Choroiditis		1										2
Conjunctivitis	3	141	8	138	10				4			654
Corneæ ulcus		21	1	18	3					1		163
Dacryocystitis		3	1	1	3							15
Glaucoma		1		1								19
Hordeolum		8		8								27
Hypermetropia		4	1	4	1							26
Iritis		28	3	25	6							282
Keratitis	1	22		18	5							194
Leucoma		1	2	3								4
Myopia		15	3	8	10							26
Neuritis optica		3		1	1					1		17
Obstructio lacrimalis		2		1	1							23
Pterygium		18	1	4	15							35
Retinitis	1	8	2	5	5	1						110
Scleritis		1		1								4
Trachoma		7	1	5	2			1				119
Other diseases of this class		5	1	1	5							38
CLASS VI:												
<i>Diseases of the auditory apparatus—</i>												
Mastoiditis		5		2	3							35
Myringitis		11		10	1							30
Membranæ tympani ruptio		19	1	18	2							83
Otalgia		2		2								5
Otitis externa		54	4	51	8	1					2	258
Otitis media	148	22	119	8	4					1		613
Surditas		11	4	8	7	2						91
Vertigo (auralis)		3	2	3	2							5
Other diseases of this class		1		1								1

8. Detailed statement, 1909—Continued.

FORCE AFLOAT, EXCLUSIVE OF HOSPITAL SHIPS, RECEIVING SHIPS, AND STATION SHIPS—Continued.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.					Continued to next year.	Total number of sick days.	
					To hospital.	From service.	On leave.	To Hospital for In- same.	Deserted.			Died.
CLASS VII:												
<i>Diseases of the olfactory apparatus—</i>												
Antri abscessus.....		2		1	1							21
Catarrhus aestivus.....		2		2								5
Rhinitis acuta.....		56		56								203
Rhinitis chronica.....	1	15	3	10	9							49
Other diseases of this class.....		6	2	5	3							32
CLASS VIII.—DISEASES OF THE NUTRITIVE APPARATUS:												
<i>Subsidiary class 1.—Diseases of the digestive system—</i>												
Adenitis salivosa.....		4		4								26
Ani prolapsio.....		2		1	1							39
Ani rhagades.....		3	1	2	2							17
Aphthae.....		3		2							1	25
Appendicitis.....	6	204	38	115	129					4		1,650
Catarrhus gastricus acutus.....	2	130	8	135	4					1		607
Catarrhus gastricus chronicus.....	2	29	6	21	15	1						279
Catarrhus intestinalis acutus.....	5	227	6	228	9					1		907
Catarrhus intestinalis chronicus.....		5	1	4	2							18
Cholangectis.....		1		1								8
Cholecystitis.....		3	1	2	2							29
Cholelithiasis.....		3	2	2	3							12
Colica.....	1	171	6	174	3					1		470
Colitis.....		5		4	1							32
Constipatio.....		95	1	94	1					1		308
Dentis caries.....		5		5								14
Dyspepsia nervosa.....		4		4								35
Enteritis.....		143	9	147	4					1		520
Enteroptosis.....		2		2	2							23
Fistula in ano.....	1	19	2	9	13							192
Gastralgia.....		8		6	2							20
Gastrectasis.....		1	1	2								25
Haematemesis.....		2		2								8
Haemorrhoids.....		149	10	77	79					3		632
Hepatis congestio.....		12		9	3							57
Hepatitis acuta.....		2	1	3								16
Hepatitis chronica.....		1		1								4
Hepatitis suppurativa.....		1		4	1							2
Hypertrophis tonsillaribus.....		5		4	1							14
Icterus.....	1	97	4	90	11					1		913
Obstructio intestinalis.....		1		1	1							2
Esophagostenosis.....		1		2	1							20
Parulis.....		2		2								24
Periproctitis.....		4		4								40
Peritonitis.....		3			3							187
Pharyngitis.....	1	43		44								7
Proctitis.....		3		1	2							19
Pyorrhoea alveolaris.....		10	1	9	1					1		713
Stomatitis.....		179		176	2					1		1,162
Tonsillitis.....	24	2,579	82	2,555	102					28		10,162
Ulcus duodenum.....		1		1	1							1
Ulcus gastricum.....		3		2	1							4
Other diseases of this class.....		9		9								41
<i>Subsidiary class 2.—Diseases of the circulatory system.—</i>												
A.—Blood vessels—												
Aneurysma.....		4			1					3		15
Angina pectoris.....	1	2		2	1							28
Arteriosclerosis.....		3	1	2	1					1		6
Cordis dilatatio.....		4		1	1					2		17
Cordis hypertrophia.....		9	2	7	4							67
Cordis palpitatio.....	2	60	27	55	31	2					1	514
Cordis valvularum morbus.....	1	31	8	15	23					2		333
Cordis inhibitio.....		1		1						1		1
Endocarditis.....		4	1	1	3	1						45

8. Detailed statement, 1909—Continued.

* FORCE AFLOAT, EXCLUSIVE OF HOSPITAL SHIPS, RECEIVING SHIPS, AND STATION SHIPS—Continued.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.				Deserted.	Died.	Continued to next year.	Total number of sick days.
					To hospital.	From service.	On leave.	To Hospital for In-sane.				
CLASS VIII.—DISEASES OF THE NUTRITIVE APPARATUS—Con.												
<i>Subsidiary class 2.—Diseases of the circulatory system—Con.</i>												
A.—Blood vessels—Continued.												
Myocarditis.....		1	1	1		1						4
Phlebitis.....		8	2	5	5							78
Thrombosis.....		1								1		1
Varix.....	1	24	3	8	18	2						171
B.—Lymphatics—												
Lymphadenitis.....	6	113	8	100	22						5	1,486
Lymphangitis.....		13	1	13	1							84
Other diseases of this class.....		5		4	1							52
<i>Subsidiary class 3.—Diseases of the respiratory system—</i>												
Asthma.....	3	21	17	28	11	2						465
Bronchopneumonitis.....		14	1	9	4				1		1	128
Bronchitis acuta.....	5	523	15	506	32						5	2,702
Bronchitis chronica.....	2	61	13	41	33	1					1	505
Hæmoptysis.....		4	2	4	1						1	24
Laryngitis.....		23	1	24	1							98
Laryngitis chronica.....		4		1	3							31
Pleuritis acuta.....		67	2	35	31						3	502
Pleuritis chronica.....	1	9		5	5							75
Pleuritis purulenta.....		4	1	1	4							69
Other diseases of this class.....		13		11	2							91
CLASS IX:												
<i>Diseases of the organs of locomotion—</i>												
Ankylosis.....		4		2	2							5
Arthritis.....	1	58	6	45	17						3	482
Arthritis deformans.....		1			1							12
Bursitis.....	2	18	2	15	7							98
Carles.....		2		1	1							3
Contractura.....		3	1	1	3							13
Ganglion.....		1		1								17
Myalgia acuta.....	3	227	16	236	7						3	1,234
Myalgia chronica.....		36	4	24	15	1						360
Necrosis.....		5		2	3							13
Osteitis.....		1			1							2
Periostitis.....		19	2	11	10							253
Pes planus.....		32	9	18	18	5						194
Synovitis.....	3	60	7	58	10						2	547
Theitis.....		5		3							2	14
Other diseases of this class.....		2			2							1
CLASS X:												
<i>Diseases of the skin and connective tissue—</i>												
Abscessus.....	17	748	25	736	39					1	14	5,130
Acne.....		6		5	1							31
Carbunculus.....		1	49	3	47	4						376
Cellulitis.....	4	248	9	247	11	1					2	2,188
Clavus.....		8	1	8		1						152
Cutis fissura.....	1	4		5								59
Dermatitis venenata.....		34	3	35	2							242
Ethyma.....		2		2								6
Eczema.....	1	45	9	47	6						2	476
Erythema.....		12	1	13								62
Favus.....		2		2								6
Furuncululus.....	5	275	16	293	2						1	1,439
Herpes simplex.....	2	8		10								37
Herpes zoster.....	1	16	1	18								109
Impetigo contagiosa.....		5		5								23
Lichen.....		1		1								34
Lupus.....		1	1	1	1							4
Miliaria papulosa.....		3		1	2							3
Onychia.....		2		2								12

8. Detailed statement, 1909—Continued.

FORCE AFLOAT, EXCLUSIVE OF HOSPITAL SHIPS, RECEIVING SHIPS, AND STATION SHIPS—Continued.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.					Continued to next year.	Total number of sick days.	
					To hospital.	From service.	On leave.	To Hospital for Insane.	Deserted.			Died.
CLASS X—Continued.												
<i>Diseases of the skin and connective tissue—Continued.</i>												
Paronychia.....	1	51	.....	52	.....	.....	.....	.....	.....	.....	.....	298
Pediculosis.....	.....	8	.....	8	.....	.....	.....	.....	.....	.....	.....	16
Pemphigus.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	3
Pernio.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Pityriasis.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Psoriasis.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Scabies.....	6	140	3	109	40	.....	.....	.....	.....	.....	.....	644
Trichophytosis.....	.....	52	.....	47	5	.....	.....	.....	.....	.....	.....	234
Uleus.....	3	70	12	69	15	.....	.....	.....	.....	1	.....	854
Unguis involutus.....	2	63	3	66	2	.....	.....	.....	.....	.....	.....	423
Urticaria.....	.....	27	1	26	2	.....	.....	.....	.....	.....	.....	108
Verruca.....	.....	10	.....	8	2	.....	.....	.....	.....	.....	.....	48
Other diseases of this class.....	1	5	.....	4	2	.....	.....	.....	.....	.....	.....	39
CLASS XI:												
<i>Veneral diseases—</i>												
Adenitis inguinalis.....	13	586	76	556	103	.....	.....	.....	.....	16	.....	8,294
Arthritis gonorrhoeica.....	2	125	23	74	68	2	.....	.....	.....	.....	.....	1,886
Chancroid.....	2	1,178	68	1,207	31	.....	.....	.....	.....	.....	.....	4,278
Epididymitis.....	6	338	55	362	29	.....	.....	.....	.....	.....	.....	4,157
Fistula urinaria.....	.....	4	2	3	3	.....	.....	.....	.....	.....	.....	51
Gonorrhoea.....	4	3,656	252	4,100	96	.....	.....	.....	.....	.....	.....	8,852
Ophthalmia gonorrhoeica.....	1	21	.....	9	13	.....	.....	.....	.....	.....	.....	265
Orchitis.....	10	300	40	319	25	1	.....	.....	.....	.....	.....	3,379
Prostatitis.....	.....	11	.....	9	2	.....	.....	.....	.....	.....	.....	86
Syphilis consecutiva.....	12	729	202	668	260	9	.....	.....	.....	.....	.....	5,362
Syphilis primitiva.....	.....	100	8	96	12	.....	.....	.....	.....	.....	.....	561
Urethra strictura.....	.....	23	2	21	4	.....	.....	.....	.....	.....	.....	204
Verruca acuminata.....	.....	23	1	18	6	.....	.....	.....	.....	.....	.....	133
Other diseases of this class.....	.....	10	2	11	1	.....	.....	.....	.....	.....	.....	153
CLASS XII:												
<i>Diseases of the genito-urinary apparatus (non-veneral)—</i>												
Balanitis.....	.....	14	.....	14	.....	.....	.....	.....	.....	.....	.....	126
Cystitis.....	2	43	2	35	11	.....	.....	.....	.....	1	.....	436
Diuresis.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	.....	16
Enuresis.....	.....	8	3	5	2	4	.....	.....	.....	.....	.....	43
Hematuria.....	.....	5	.....	2	3	.....	.....	.....	.....	.....	.....	13
Hydrocele.....	.....	13	1	10	4	.....	.....	.....	.....	.....	.....	112
Nephritis acuta.....	.....	28	2	17	12	.....	.....	.....	.....	1	.....	806
Nephritis chronica.....	.....	18	1	4	13	.....	.....	.....	.....	2	.....	120
Nephrothiasis.....	.....	6	3	7	3	.....	.....	.....	.....	.....	.....	51
Paraphimosis.....	1	20	1	20	2	.....	.....	.....	.....	.....	.....	210
Perinephritis.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	5
Phimosi.....	8	161	7	173	1	.....	.....	.....	.....	2	.....	1,197
Pyelitis.....	.....	5	2	6	2	.....	.....	.....	.....	.....	.....	63
Urethritis simplex.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	7
Urine incontinentia.....	.....	4	3	4	3	.....	.....	.....	.....	.....	.....	69
Urine suppressio.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Urine retentio.....	.....	8	.....	8	.....	.....	.....	.....	.....	.....	.....	76
Varicocele.....	3	121	10	52	82	.....	.....	.....	.....	.....	.....	716
Other diseases of this class.....	.....	23	2	20	5	.....	.....	.....	.....	.....	.....	213
CLASS XIII:												
<i>Cysts and new growths—</i>												
Adenoma.....	.....	3	.....	2	1	.....	.....	.....	.....	.....	.....	14
Angioma.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Carcinoma.....	.....	5	.....	.....	5	.....	.....	.....	.....	.....	.....	18
Chondroma.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Cystis.....	18	1	.....	16	3	.....	.....	.....	.....	.....	.....	110
Epithelioma.....	.....	3	.....	1	2	.....	.....	.....	.....	.....	.....	20
Fibroma.....	.....	4	.....	2	2	.....	.....	.....	.....	.....	.....	31
Lipoma.....	.....	5	.....	4	1	.....	.....	.....	.....	.....	.....	29
Osteoma.....	.....	3	2	2	3	.....	.....	.....	.....	.....	.....	17
Other diseases of this class.....	.....	4	.....	2	2	.....	.....	.....	.....	.....	.....	5

8. Detailed statement, 1909—Continued.

FORCE AFLOAT, EXCLUSIVE OF HOSPITAL SHIPS, RECEIVING SHIPS, AND STATION SHIPS—Continued.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.					Continued to next year.	Total number of sick days.	
					To hospital.	From service.	On leave.	To Hospital for Insane.	Deserted.			Died.
CLASS XIV:												
<i>Injuries—</i>												
Abrasio.....	1	34	1	36								178
Ambustio ex calore.....	8	235	5	229	15				3	1		1,737
Ambustio ex electricitate.....		6		5	1							31
Ambustio ex venenis.....		6		5	1							34
Asphyxia.....		11		6					5			10
Asphyxia ex submersione.....	1	32		3					30			51
Cartilaginis intra-articularis dis-												
locatio.....		4	1	3	2							20
Conussio.....		41	3	39	4				1			264
Contusio.....	7	551	10	545	14					9		3,154
Deformitas.....		51	14	30	29	5				1		475
Dislocatio.....	1	61	16	67	9					2		978
Fractura.....	9	339	10	262	75	1	1		7	12		5,075
Fulminis ictus.....		1		1								19
Hernia.....	1	150	35	45	141							837
Ictus electricus.....		1		1								2
Membri clades.....		9	2	7	3					1		246
Musculi ruptio.....			1		1							8
Visceris ruptio.....	1	5	1	3	3				1			52
Sciss ictus.....		9		9	3							25
Strenuus.....	14	610	20	618	17			1		8		3,889
Virium defectio.....		2		1		1						23
Vulnus contusum.....	2	156		151	5					2		1,132
Vulnus incisum.....	5	169		170	2				1	1		1,170
Vulnus infectum.....		184	11	181	6					8		1,324
Vulnus laceratum.....	16	531	7	521	18				1	14		5,311
Vulnus punctum.....	1	64	3	65	3							325
Vulnus scopeticum.....	2	21		11	6				6			245
Other diseases of this class.....		7	1	6	2							54
CLASS XV:												
<i>Extraneous bodies—</i>												
Corpus extraneum.....		22		21	1							57
CLASS XVI:												
<i>Poisons—</i>												
Alcoholismus.....	1	202	12	183	27				5			629
Venenum irritans.....		18		16					2			64
Venenum neuroticum.....	1	25	3	22	4	2				1		136
Vulnus venenatum.....	1	23	1	24					1			144
Other diseases of this class.....		6	1	3	4							10
CLASS XVII:												
<i>Feigned diseases—</i>												
Appendicitis.....		1		1								6
Diarrhoea.....		1		1								2
Myopia.....		1		1								1
Total.....	321	22,756	1,082	21,039	3,301	61	3	2	2	88	278	133,910

9. General aggregate, 1909.

NAVY-YARDS AND SHORE STATIONS, MARINE BARRACKS, RECEIVING SHIPS, AND STATION SHIPS.

Classification of diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.					Continued to next year.	Total number of sick days.	
					To hospital.	From service.	On leave.	To hospital for insane.	Deserted.			Died.
CLASS I.												
Parasitic infections (animal).....		15	1	13	3							38
CLASS II.												
General infective diseases.....	36	3,699	401	2,507	1,555	22	3			7	42	21,791
CLASS III.												
Constitutional disorders of nutrition:												
Subsidiary Class 1.—General diseases of nutrition.....	1	5	2	3	3	2						22
Subsidiary Class 2.—Diseases of the blood.....		17	1	11	3	4						145
Subsidiary Class 3.—Diseases of the ductless glands.....		10		3	4	3						24
CLASS IV.												
Diseases of the nervous system.....	8	425	62	253	143	68	6	14	1	3	7	2,567
CLASS V.												
Diseases of the visual apparatus....	5	481	76	374	128	52	4				4	2,489
CLASS VI.												
Diseases of the auditory apparatus..	1	218	20	96	89	51					3	956
CLASS VII.												
Diseases of the olfactory apparatus..		113	2	101	11	3						266
CLASS VIII.												
Diseases of the nutritive apparatus:												
Subsidiary Class 1.—Diseases of the digestive system.....	18	1,985	64	1,413	611	21	1		1	2	18	6,628
Subsidiary Class 2.—Diseases of the circulatory system.....	8	319	35	131	93	133	1			1	3	2,216
Subsidiary Class 3.—Diseases of the respiratory system.....	7	630	24	492	143	12			1	2	11	3,618
CLASS IX.												
Diseases of the organs of locomotion.	4	397	44	241	99	100					5	2,831
CLASS X.												
Diseases of the skin and connective tissue.....	10	967	57	753	267	9					14	5,940
CLASS XI.												
Venereal diseases.....	33	3,369	371	2,950	735	50	1		1		36	17,083
CLASS XII.												
Diseases of the genito-urinary apparatus.....	3	373	25	179	158	27			1	3	3	1,876
CLASS XIII.												
Cysts and new growths.....		32		16	14	2						126
CLASS XIV.												
Injuries.....	21	1,521	80	1,096	349	119			2	29	27	10,442
CLASS XV.												
Extraneous bodies.....		11		9	2							34
CLASS XVI.												
Poisons.....	4	186	14	138	55	4				5	2	606
CLASS XVII.												
Feigned diseases.....		2		2								4
Total.....	168	14,775	1,279	10,781	4,495	682	16	14	7	82	175	79,702

10. Detailed statement, 1909.

NAVY-YARDS AND SHORE STATIONS, MARINE BARRACKS, RECEIVING SHIPS AND STATION SHIPS.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.					Continued to next year.	Total number of sick days.	
					To hospital.	From service.	On leave.	To Hospital for In- sane.	Deserted.			Died.
CLASS I:												
<i>Parasitic infections (animal)—</i>												
Ankylostomiasis.....		4		4								10
Ascariasis.....		2		2								8
Oxyuriasis.....		1		1								3
Teniasis.....		7	1	6	3							14
Trichiniasis.....		1		1								3
CLASS II:												
<i>General infective diseases (nonvenereal)—</i>												
Catarrhus epidemicus.....	3	548	14	497	60		1			7		1,950
Dengul.....	3	435	18	334	119					3		1,525
Diphtheria.....		11		11	11							
Dysentery amœbœa.....	2	45	5	39	12					1		502
Dysentery infectiva (bacillary).....		11	3	8	6							65
Dysentery (undefined).....	1	20		11	10							71
Enteritis infectiva.....		1		1								1
Erysipelas.....		12		3	9							45
Febris cerebro-spinalis.....		9	1	7	1				2			286
Febris pneumonica.....	1	75	1	27	45		1		1	3		647
Febris recurrens.....		7	3	7	3							46
Febris rheumatica.....	1	144	16	87	69	3				2		1,584
Febris typhoides.....	3	40	3	13	31		1		1			689
Frambœsia.....	1					1						61
Gangræna actua infectiva.....		1			1							
<i>Malaria—</i>												
(a) Cachexia malarialis.....	1	14	5	11	9							156
(b) Febris æstivo-autumnalis.....	2	85	32	117	2							500
(c) Febris hæmoglobinurica.....		23	2	25								214
(d) Febris quartana.....		2	1	3								24
(e) Febris tertiana.....	2	604	233	623	210					6		3,161
Morbilli.....	1	326	3	45	285							722
Parotiditis epidemica.....	12	692	17	380	337					4		5,652
Pertussis.....		2		1	1							18
Pyrexia ortus inertil.....		127	3	61	65					4		311
Rheumatismus articularis chronicus.....	1	64	18	44	34	3				2		1,257
Rubella.....	1	156	4	69	86					6		912
Scarlatina.....		51	1	3	49							75
Tuberculosis miliaris acuta.....		8			4	3				1		91
Tuberculosis pneumonica.....	1	87	16	11	77	11			2	3		703
Tuberculosis of other parts.....		4	1	2	1	1			1			47
Vaccinia.....		61		59	2							280
Varicella.....		15		5	10							54
Variola.....		2		2								24
Other diseases of this class.....		16	1	11	6							44
CLASS III.—CONSTITUTIONAL DISORDERS OF NUTRITION:												
<i>Subsidiary class 1.—General diseases of nutrition—</i>												
Diabetes mellitus.....		2	1	1	2							12
Obesitas.....		2	1	1		2						4
Purpura.....	1			1								3
Other diseases of this class.....		1			1							3
<i>Subsidiary class 2.—Diseases of the blood—</i>												
Anæmia pernicios.....		1			1							14
Anæmia simplex.....		16	1	11	2	4						131
<i>Subsidiary class 3.—Diseases of the ductless glands—</i>												
Bronchocele.....		10		3	4	3						24
CLASS IV:												
<i>Diseases of the nervous system—</i>												
Apoplexia.....		3							3			3
Aphasia.....		1			1							27
Atrophia muscularis progressiva.....		1			1							

10. Detailed statement, 1909—Continued.

NAVY-YARDS AND SHORE STATIONS, MARINE BARRACKS, RECEIVING SHIPS AND STATION SHIPS—Continued.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.				Deserted.	Died.	Continued to next year.	Total number of sick days.
					To hospital.	From service.	On leave.	To Hospital for In- sane.				
CLASS IV—Continued.												
<i>Diseases of the nervous system—Continued.</i>												
Cephalalgia.....		77	4	74	7							158
Chorea.....		6	3	2	5	2						40
Dementia.....		38	3	5	23	4		9			1	318
Epilepsia.....	2	46	18	15	13	33			1		4	464
Febris thermica.....		13		13					1			57
Hemiplegia.....		5		1	2	2						41
Insomnia.....		8		7	1							80
Mania.....		5		1	2							11
Melancholia.....		5	3		7	2		2				106
Menigitis.....		1		1	1		1				1	106
Monoplegia.....		1		2								33
Nausea marina.....		1	1	1		1						16
Neuralgia.....	2	50	6	47	11							232
Neurasthenia.....		57	14	24	32	12	3					286
Neuritis.....	1	13		8	4	2						232
Nostalgia.....		2		2								9
Paranoia.....		11	2		10			2			1	49
Paraplegia.....		1		1								2
Prostratio thermica.....		6	1	4	2	1						12
Scatica.....		13	2	9	6							99
Sclerosis spinalis posterior.....		1			1							
Torticollis spasmodica.....		7		6	1							23
Vertigo.....		22	3	19	5		1					113
Other diseases of this class.....	1	29	1	14	6	9	2					156
CLASS V:												
<i>Diseases of the visual apparatus—</i>												
Achromatopsia.....		14	1	3	2	10						61
Ammaurosis.....		1		1								5
Amblyopia.....		14	1	2	8	5						56
Asthenopia.....		67	15	59	17	4	2					383
Astigmatismus.....		93	14	75	21	9					2	271
Blepharitis.....		3		3	1							13
Cataracta.....		3		2	1							3
Chalazion.....		2		1	1							29
Choroiditis.....		2		2								3
Conjunctivitis.....		112	12	105	12	4	2			1		583
Cornem ulcus.....		2		2								
Dacryocystitis.....		1		1								
Ectropium.....		1		1								
Glaucoma.....		1		1								
Hordeolum.....		7	1	8								15
Hypertropia.....	3	32	6	29	8	4						177
Iritis.....	1	14		12	3							172
Keratitis.....		4	1	5								25
Myopia.....		71	21	54	26	11					1	280
Neuritis optica.....		2	1	1	1	1						21
Obstructio lacrimalis.....		2		1	1							1
Pterygium.....	1	13	1	6	8	1						65
Retinitis.....		7		2	4	1						83
Synechia.....		1		1								2
Trachoma.....		6		1	5							207
Other diseases of this class.....		5	2	3	2	2						34
CLASS VI:												
<i>Diseases of the auditory apparatus—</i>												
Mastoiditis.....		7	2	3	5						1	42
Membranae tympani ruptio.....		6	1	5		2						49
Otalgia.....		2		2								4
Otitis externa.....		20	4	15	9							91
Otitis media.....	1	138	11	60	64	25					1	516
Surditas.....		45	2	11	11	24					1	254
CLASS VII:												
<i>Diseases of the olfactory apparatus—</i>												
Rhinitis acuta.....		98		95	3							239
Rhinitis chronica.....		12	2	5	6	3						26
Other diseases of this class.....		3		1	2							1

10. Detailed statement, 1909—Continued.

NAVY-YARDS AND SHORE STATIONS, MARINE BARRACKS, RECEIVING SHIPS AND STATION SHIPS—Continued.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.				Continued to next year.	Total number of sick days.
					To hospital.	From service.	On leave.	To Hospital for In- sane.		
CLASS VIII.—DISEASES OF THE NUTRITIVE APPARATUS:										
<i>Subsidiary class 1.—Diseases of the digestive system—</i>										
Adenitis salivosa.....		2		1	1					4
Ani prolapsio.....		2			2					2
Ani rhagades.....		3			3					3
Appendicitis.....	2	131	11	31	109	2		1	1	703
Catarrhus gastricus acutus.....		133	3	123	13					428
Catarrhus gastricus chronicus.....		21	5	10	14	1	1			197
Catarrhus intestinalis acutus.....	1	207	6	199	13				2	613
Catarrhus intestinalis chronicus.....		7		3	3	1				12
Cholangitis.....		2		2						10
Cholecystitis.....		6		3	3					10
Cholelithiasis.....		2	2		3	1				4
Colica.....		108	4	101	11					244
Colitis.....		15	1	15	1					30
Constipatio.....	1	67	1	67	2					178
Dentis caries.....		15		10	1	4				85
Dyspepsia nervosa.....		5	1	3	2				1	23
Enteritis.....		33		29	3				1	117
Fistula in ano.....	1	23	1	9	16					229
Gastralgia.....		7		6	1					38
Gastroctasis.....		1		1						1
Hæmorrhoids.....		127	6	32	93	7			1	361
Hepatitis congestio.....	1	9		10						31
Hepatitis acuta.....		2			2					2
Hepatitis chronica.....	1	3			2	1				23
Hepatitis suppurativa.....		1		1						2
Hypertrophia tonsillarum.....		29	1	7	22	1				54
Icterus.....		40	2	20	21				1	208
Obstructio intestinalis.....		3		2					1	8
Pancreatitis.....		1			1					1
Parulis.....		4		4						5
Peritonitis.....		1		1						11
Pharyngitis.....	1	40		31	10					105
Proctitis.....		2		2						2
Pyorrhœa alveolaris.....		3	1	3	1					28
Stomatitis.....		77	1	66	10			1		436
Tonsillitis.....	10	824	16	601	237	2		10		2,352
Ulcus duodenum.....		1		1	1					5
Ulcus gastricum.....		4	1		5					6
Other diseases of this class.....		26		22	3	1				71
<i>Subsidiary Class 2.—Diseases of the circulatory system—</i>										
A—Blood vessels—										
Aneurysma.....		2		1	1					17
Angina pectoris.....		6		5	1					58
Arteriosclerosis.....		2			1	1				19
Cordis dilatatio.....		8	2	3	1	5		1		17
Cordis hypertrophia.....		10		11	4	5				51
Cordis palpitatio.....	1	50	11	27	17	17			1	337
Cordis valvularum morbus.....	3	113	9	19	19	85	1		1	692
Endocarditis.....		5	1		5	1				86
Myocarditis.....		1				1				13
Phlebitis.....		8		4						20
Thrombosis.....		1	1		1	1				22
Varix.....		31	9	13	13	14				232
B—Lymphatics—										
Lymphadenitis.....	2	60	1	37	22	3			1	466
Lymphangitis.....	2	19	1	19	3					189
Other diseases of this class.....		3		2	1					7
<i>Subsidiary class 3.—Diseases of the respiratory system—</i>										
Asthma.....		20	7	14	9	4				130
Bronchopneumonitis.....	2	24		18	8					330
Bronchitis acuta.....	2	415	8	361	56			1	7	2,009

10. Detailed statement, 1909—Continued.

NAVY-YARDS AND SHORE STATIONS, MARINE BARRACKS, RECEIVING SHIPS AND STATION SHIPS—Continued.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.					Continued to next year.	Total number of sick days.	
					To hospital.	From service.	On leave.	To Hospital for Injane.	Deserted.			Died.
CLASS VIII.—DISEASES OF THE NUTRITIVE APPARATUS—Con.												
<i>Subsidiary class 5.—Diseases of the respiratory system—Con.</i>												
Bronchitis chronica.....		46	5	17	26	8						266
Hæmoptysis.....		5		1	4							16
Laryngitis acuta.....	1	47	1	39	9						1	270
Laryngitis chronica.....		5		2	3							7
Pleuritis acuta.....		49	3	32	18						2	319
Pleuritis chronica.....		10		2	8							16
Pleuritis purulenta.....	1	2							2	1		131
Other diseases of this class.....	1	7		6	2							44
CLASS IX: Diseases of the organs of locomotion—												
Ankylosis.....		2		1	1							1
Arthritis.....	1	39	7	28	10	8				1		520
Bursitis.....		16	2	12	4	1				1		142
Contractura.....		8		2	1	5						78
Myalgia acuta.....	2	125	7	106	27						1	438
Myalgia chronica.....		25	3	13	14	1						215
Necrosis.....		3			2	1						3
Osteitis.....		10		3	6							2
Periostitis.....		3			3						1	18
Pes planus.....	1	108	15	35	7	81				1		1,071
Synovitis.....		48	10	37	18	3						326
Theclitis.....		6		4	2	3						16
Other diseases of this class.....		4			4							1
CLASS X: Diseases of the skin and connective tissue—												
Abcessus.....	6	249	12	204	58					5		1,963
Aene.....		3		1	1	1						6
Carbunculus.....	1	16	1	14	4							126
Cellulitis.....		61	1	43	18	1						359
Clavus.....		30	3	27	1	5						199
Cutis fissura.....		2		2								15
Dermatitis venenata.....		32	1	29	3					1		160
Dysidrosis.....		1		1								20
Ecthyma.....		1		1								4
Eczeema.....		33	3	27	7	2						190
Erythema.....		8		7	3							38
Favus.....		2		2								6
Furunculus.....	1	96	7	97	7							470
Herpes simplex.....		1		1								1
Herpes zoster.....	1	12	1	14								74
Impetigo contagiosa.....		8		7						1		55
Lichen.....		1		1								7
Lupus.....		1			1							1
Miliaria papulosa.....		1			1							1
Onychia.....		3		2						1		53
Paronychia.....		9		9								80
Pediculosis.....		23		21	2							50
Pemphigus.....		7		7								22
Perno.....		1		1								7
Pityriasis.....		3		2	1							2
Prurigo.....		1	2	1	1					1		80
Pruritus.....		1		1								1
Psoriasis.....		4		3	1							22
Scabies.....		176	19	63	131					1		600
Scleroderma.....		1		1								1
Trichophytosis.....	2	49	1	49	3							261
Ulcus.....	4	41	4	34	13					2		451
Unguis involutus.....	4	72	2	67	9					2		575
Urticaria.....		11		10	1							31
Verruca.....		3		2	1							4
Other diseases of this class.....		4		2	2							7

10. Detailed statement, 1909—Continued.

NAVY-YARDS AND SHORE STATIONS, MARINE BARRACKS, RECEIVING SHIPS AND STATION SHIPS—Continued.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.				Deserted.	Died.	Continued to next year.	Total number of sick days.
					To hospital.	From service.	On leave.	To Hospital for Insane.				
CLASS XI:												
<i>Veneral diseases—</i>												
Adenitis inguinalis.....	7	202	28	156	75						6	2,562
Arthritis gonorrhoeica.....	1	66	21	29	49	4					6	799
Chaneroid.....	7	384	32	386	31	1					5	1,902
Epididymitis.....	7	135	6	100	46						1	1,029
Gonorrhoea.....	8	1,808	125	1,744	175	13			1		8	4,398
Ophthalmia gonorrhoeica.....		57	6	53	9							208
Orchitis.....	2	165	24	134	53	1					3	1,486
Prostatitis.....		1		1								28
Syphilis consecutiva.....	1	457	124	295	252	30	1				4	3,906
Syphilis primitiva.....		58	2	34	24						2	698
Urethra strictura.....		20	3	7	16							25
Verruca acuminata.....		15		11	4							42
Other diseases of this class.....		1			1							
CLASS XII:												
<i>Diseases of the genito-urinary apparatus (non-venereal)—</i>												
Balanitis.....	1	7		8								8
Calculus.....		1		1								7
Cystitis.....		23		15	6	1					1	202
Diuresis.....		1		1								2
Enuresis.....	1	29	5	10	14	11						220
Glandulae prostatae hypertrophica.....		2		2								73
Hematuria.....		3		2							1	58
Hydrocele.....		20	1	8	12	1						98
Nephritis acuta.....	1	9	1	4	6				1			45
Nephritis chronica.....		16	4	12	7				1			70
Nephrolithiasis.....		3	1	4								26
Nephrotosis.....		1	1	1	1							1
Paraphimosis.....		9		7	2							37
Phimosis.....		114	4	70	47						1	513
Pyelitis.....		2		1	1							5
Urethritis simplex.....		1		1								2
Urine incontinentia.....		2			1	1						11
Urine suppressio.....		2							1			
Urine retentio.....		1										
Variocele.....		121	8	29	87	12			1			454
Other diseases of this class.....		7		3	3	1						44
CLASS XIII:												
<i>Cysts and new growths—</i>												
Adenoma.....		1				1						6
Cystis.....		11		7	4							21
Epithelioma.....		3		2	1							2
Fibroma.....		4		1	3							1
Lipoma.....		7		4	3							40
Osteoma.....		3		1	1	1						51
Sarcoma.....		2			2							2
Other diseases of this class.....		1		1								3
CLASS XIV:												
<i>Injuries—</i>												
Abrasio.....		55	2	56	1							263
Ambustio ex calore.....	1	55		50	4						2	362
Ambustio ex frigore.....		1		1								1
Ambustio ex venenis.....		4		2	2							34
Asphyxia.....		3		2								5
Asphyxia ex submersione.....		17		1	1					15		19
Cartilaginis intra-articularis dislocatio.....		4		2	2							40
Concussio.....		16		14	2							66
Contusio.....	4	174	12	170	16	3					1	1,018
Deformitas.....	2	112	19	34	29	69					1	564
Dislocatio.....		30		19	9	1						183
Fractura.....	4	153	7	84	63	4				2	4	2,300
Fulminis ictus.....		1		1								4
Hernia.....	4	185	17	41	122	38					5	1,148

10. Detailed statement, 1909—Continued.

NAVY-YARDS AND SHORE STATIONS, MARINE BARRACKS, RECEIVING SHIPS AND STATION SHIPS—Continued.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.				Deserted.	Died.	Continued to next year.	Total number of sick days.
					To hospital.	From service.	On leave.	To Hospital for insane.				
CLASS XIV—Continued.												
<i>Injuries—Continued.</i>												
Membra clades.....		3		2	1							98
Musculi ruptio.....		4		4								57
Strenua.....	1	315	11	290	32	1				4		1,624
Virium defectio.....		2		2		2						2
Vulnus contusum.....		53	2	47								206
Vulnus incisum.....		72	1	63	10					1	1	532
Vulnus infectum.....		65		53	12							364
Vulnus laceratum.....		128	5	116	16					4	4	1,191
Vulnus punctum.....		27		22	4						1	127
Vulnus sclopeteum.....		25	1	8	11					7		125
Other diseases of this class.....		17	2	14	3	1				1		109
CLASS XV:												
<i>Extraneous bodies—</i>												
Corpus extraneum.....		11		9	2							34
CLASS XVI:												
<i>Poisons—</i>												
Alcoholismus.....		141	12	104	44	2				2	1	302
Venenum irritans.....		5		3	1					1		7
Venenum neuroticum.....		1	17	10	4	2				2		82
Vulnus venenatum.....		3	21	19	6							120
Other diseases of this class.....		2	1	2							1	35
CLASS XVII:												
<i>Feigned diseases—</i>												
Dementia.....		1		1								1
Melancholia.....		1		1								3
Total.....	168	14,775	1,279	10,781	4,405	682	16	14	7	52	175	79,702

11. *General aggregate, 1909.*

NAVAL HOSPITALS (EXCLUSIVE OF LAS ANIMAS) AND HOSPITAL SHIPS RELIEF AND SOLACE.

Classification of diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.				Deserted.	Died.	Continued to next year.	Total number of sick days.
					To hospital.	From service.	On leave.	To Hospital for In- sane.				
CLASS I.												
Parasitic infections (animal).....		4	4	8								286
CLASS II.												
General infective diseases.....	114	375	2,484	2,349	388	47	12	6	41	130		72,758
CLASS III.												
Constitutional disorders of nutri- tion:												
Subsidiary Class 1.—General diseases of nutrition.....	2	6	14	4	6	8	1		2	1		507
Subsidiary Class 2.—Diseases of the blood.....	2	8	8	12	2		2		1	1		620
Subsidiary Class 3.—Diseases of the ductless glands.....		1	5	4		2						181
CLASS IV.												
Diseases of the nervous system.....	26	53	379	183	51	110	9	66	6	2	31	13,444
CLASS V.												
Diseases of the visual apparatus....	14	28	230	184	21	47	5				15	8,669
CLASS VI.												
Diseases of the auditory apparatus..	14	27	166	115	16	59					17	6,765
CLASS VII.												
Diseases of the olfactory apparatus.	6	4	22	24	2	3					3	614
CLASS VIII.												
Diseases of the nutritive apparatus:												
Subsidiary Class 1.—Diseases of the digestive system.....	73	125	1,010	1,025	50	24	13	3	12	81		28,630
Subsidiary Class 2.—Diseases of the circulatory system.....	34	48	209	148	24	85	3		10	21		9,460
Subsidiary Class 3.—Diseases of the respiratory system.....	29	36	268	242	30	27	2	2	1	29		10,810
CLASS IX.												
Diseases of the organs of locomotion.	21	20	201	142	21	44	5	2		28		10,143
CLASS X.												
Diseases of the skin and connective tissue.....	31	43	407	394	26	9	2	2	2	46		14,979
CLASS XI.												
Venereal diseases.....	215	291	1,419	1,387	78	223	1	13	5	218		84,552
CLASS XII.												
Diseases of genito-urinary apparatus	41	47	336	307	24	40	2	1	12	38		14,555
CLASS XIII.												
Cysts and new growths.....	2	9	32	28	7	2			4	2		1,504
CLASS XIV.												
Injuries.....	90	67	715	591	49	92	14	4	10	112		35,734
CLASS XV.												
Extraneous bodies.....	1		3	3	1							80
CLASS XVI.												
Poisons.....	6	12	94	88	9	11	1	1	2			1,847
CLASS XVII.												
Feigned diseases.....			9	9								136
Total.....	721	1,204	8,015	7,247	805	833	71	67	40	104	773	316,274

12. Detailed statement, 1909.

NAVAL HOSPITALS AND HOSPITAL SHIPS.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.				Deserted.	Died.	Continued to next year.	Total number of sick days.
					To hospital.	From service.	On leave.	To Hospital for In-sane.				
CLASS I:												
<i>Parasitic infections (animal)—</i>												
Ankylostomiasis.....		3		3								91
Ascariasis.....		1	1	2								147
Trichostrongylosis.....			3	3								48
CLASS II:												
<i>General infective diseases (non-venereal).</i>												
Catarrhus epidemicus.....	2	11	72	80	2	1					2	1,688
Denguis.....	1	2	119	122								902
Diphtheria.....	1	14	13	23		1			1	3		733
Dysentery amœbica.....	6	2	25	20	6	2	1				4	1,903
Dysentery infectiva (bacillary).....				1	1							32
Dysentery (undefined).....	2		18	15	2	3						910
Enteritis flagellata.....		1	1	2								52
Enteritis infectiva.....			1	1								29
Erysipelas.....	1	2	11	11			1				2	374
Febris cerebro-spinalis.....		1	1	2								130
Febris melitensis.....	1			1								38
Febris pneumonica.....	2	20	94	82	11	1	1		11	10		3,719
Febris recurrens.....			3	3								36
Febris rheumatica.....	10	7	131	105	15	10		2		16		6,315
Febris typhoides.....	5	34	129	110	17		8		13	20		8,675
Gangræna acuta infectiva.....			1						1			1
<i>Malaria—</i>												
(a) Cachexia malarialis.....	5	1	14	15	2	2					1	496
(b) Febris æstivo-autumnalis.....	3	7	6	14	1						1	482
(c) Febris quartana.....		1	4	4	1							118
(d) Febris tertiana.....	18	32	234	261	16	1		1		5		6,253
Morbillus.....		23	488	490	17	1				13		8,510
Parotiditis epidemica.....	18	36	489	516	16			3		8		10,998
Pertussis.....			1	1								77
Pyæmia.....		2							2			6
Pyrexia ortus incerti.....		7	83	81	7					2		920
Rheumatismus articularis chronicus.....	8	9	83	62	17	11	1				9	4,200
Rubella.....		36	147	109	10						4	2,275
Scarlatina.....	1	24	68	79	3	1			3	7		3,415
Septicæmia.....	1	1	2	1	2	1						594
Tuberculosis miliaris acuta.....		3	7	4	2	1				3		276
Tuberculosis pneumonica.....	23	74	214	48	231	10				3	19	7,097
Tuberculosis of other parts.....	3	8	5	7	7	1				1		828
Vaccinia.....		2	2	3	1							20
Varicella.....	1	10	11	17	1					4		378
Variola.....	1	4	1	3					3			184
Other diseases of this class.....	1	1	5	6	1							117
CLASS III.—CONSTITUTIONAL DISORDERS OF NUTRITION:												
<i>Subsidiary class 1.—General diseases of nutrition—</i>												
Diabetes insipidus.....		1	1	1	1							97
Diabetes mellitus.....		2	6		2	3	1			2		236
Hæmophilia.....		1				1						6
Lithæmia.....		1			1	1						38
Purpura.....		1			1							6
Other diseases of this class.....	2	1	5	3	1	3					1	124
<i>Subsidiary class 2.—Diseases of the blood—</i>												
Anæmia chronica splenica.....			1							1		101
Anæmia perniciososa.....			1				1					57
Anæmia simplex.....	2	5	6	10	2		1					277
Leucocythæmia.....		3		2							1	185
<i>Subsidiary class 3.—Diseases of the ductless glands—</i>												
Bronchocele.....		1	5	4		2						181
CLASS IV:												
<i>Diseases of the nervous system—</i>												
Aphasia.....			1			1						35
Cephalalgia.....	1	1	12	8	2	1	1	1		1		401

12. Detailed statement, 1909—Continued.

NAVAL HOSPITALS AND HOSPITAL SHIPS—Continued.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.				Deserted.	Died.	Continued to next year.	Total number of sick days.
					To hospital.	From service.	On leave.	To Hospital for In- mane.				
CLASS IV—Continued.												
<i>Diseases of the nervous system—</i>												
<i>Continued.</i>												
Chorea.....			5	2	1						2	75
Dementia.....	1	4	55	9	4	11		33			2	1,193
Encephalitis.....		1										1
Epilepsia.....	3	5	35	14	1	26		1			1	1,078
Febris thermica.....		1	1	1								34
Hemiplegia.....	2	2	8	4	3	3					2	657
Insomnia.....	1		1				1					6
Mania.....		2	10	2	2	2		5				180
Melancholia.....	4	31	3	6	9	1	13	1			2	545
Meningitis.....		1	1	1								34
Monoplegia.....		4	1	1	1	2						182
Myelitis.....	1		1	1								17
Nausea marina.....		1	5	1		4					1	135
Neuralgia.....	2	2	16	13			1				2	368
Neurasthenia.....	4	14	96	62	17	21	4		2		8	3,952
Neuritis.....	4	1	15	17	1	1	4		1			1,082
Neuritis multiplex.....		1	3	2	1	1						277
Paralysis agnans.....			1		1							17
Paralysis insanorum generalis.....		2	2		1			3				80
Paranoia.....	1	1	17	5	2	2		10				357
Paraplegia.....			1								1	21
Prostratio thermica.....	1		6	3	2	2						200
Sciatica.....		1	13	9	3						2	550
Sclerosis spinalis lateralis spas- tica.....		1			1							3
Sclerosis spinalis multiplex.....			1			1						31
Sclerosis spinalis posterior.....	2	2	4	4		3					1	378
Torticollis spasmodica.....						1						57
Vertigo.....			14	9		2	1	1			1	252
Other diseases of this class.....	5	8	20	12	3	14		1		1	2	1,246
CLASS V:												
<i>Diseases of the visual apparatus—</i>												
Achromatopsia.....			3	1		2						51
Amblyopia.....		1	17	8	4	5					1	667
Asthenopia.....	1	2	25	21	2	4	1					560
Astigmatismus.....	1	2	25	22	1	3					2	398
Blepharitis.....			1		1							4
Cataracta.....	1	1	4	5		1						126
Chalazion.....			1	1								87
Chorioiditis.....		1	4	2		2	1					203
Conjunctivitis.....	1		19	15	1	3					1	452
Corneæ ulcus.....	1	1	5	6		1						274
Dacryocystitis.....		1	4	4		1						192
Ectropium.....			1	1								58
Glaucoma.....			1	1								21
Hordeolum.....		2		2								8
Hypermetropia.....		3	6	6		2					1	140
Iritis.....	2	1	9	7		7					3	462
Keratitis.....	1	3	5	5		3	1					551
Leucoma.....		2		2								110
Myopia.....			37	26	1	9						745
Neuritis optica.....	1	3	3	1	1	2	1				2	898
Obstructio lacrimalis.....		1	2	2								1
Pterygium.....	1	2	24	25	1	4						168
Retinitis.....	2		13	5	4	4	1					786
Trachoma.....	2		8	5	3	1					1	758
Other diseases of this class.....		2	13	11	2	2						485
CLASS VI:												
<i>Diseases of the auditory apparatus—</i>												
Mastoiditis.....		1	7	5	1	1					1	228
Myringitis.....			1	1								48
Membrana tympani rupta.....			2			2						85
Otitis externa.....		1	17	16								398
Otitis media.....	9	16	120	79	13	41					12	4,682
Surditas.....	5	8	19	13	2	15					2	1,300
Other diseases of this class.....		1		1								24

12. Detailed statement, 1909—Continued.

NAVAL HOSPITALS AND HOSPITAL SHIPS—Continued.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.				Deserted.	Died.	Continued to next year.	Total number of sick days.
					To hospital.	From service.	On leave.	To Hospital for in- sane.				
CLASS VII:												
<i>Diseases of the olfactory apparatus—</i>												
Antritis abscessus.....	1			1								24
Rhinitis acuta.....		1	2								1	19
Rhinitis chronica.....	4	2	16	15	2	3					2	456
Other diseases of this class.....	1	1	4	6								115
CLASS VIII.—DISEASES OF THE NUTRITIVE APPARATUS:												
<i>Subsidiary class 1.—Diseases of the digestive system—</i>												
Ani prolapsio.....		1	2	2		1						69
Ani rhaades.....			5	5								153
Appendicitis.....	30	40	228	229	12	9	10		1	6	31	10,830
Catarrhus gastricus acutus.....		2	16	16								198
Catarrhus gastricus chronicus.....	3	3	28	24	4	4						1,680
Catarrhus intestinalis acutus.....	1	5	17	19	3							327
Catarrhus intestinalis chronicus.....	1	6	10	11	3							494
Cholecystitis.....	1	1	6	6								395
Cholelithiasis.....		2	4	5		1						349
Colica.....		1	13	12	1							299
Colitis.....			3	3								43
Constipatio.....	1	4	6	10	1							192
Dentis caries.....			1	1								10
Dyspepsia nervosa.....		1	2	2	1							7
Enteritis.....			7	5	2							128
Enteroptosis.....			2	2								75
Fistula in ano.....	5	1	28	25	4	2					3	1,001
Gastralgia.....			3	2		1						53
Hæmorrhoids.....	11	14	177	180	8	2		1		11		4,261
Hepatitis acuta.....		1	3	3						1		143
Hepatitis chronica.....	1	1	2	1					2	1		389
Hepatitis suppurativa.....	1	3		2					1	1		293
Hypertrophia tonsillarum.....			23	21	2							469
Icterus.....	1	2	36	38				1				1,111
Obstructio intestinalis.....		2	1	1					1	1		49
Oesophagostenosis.....			1	1								1
Pancreatitis.....			1	1								63
Peritonitis.....		2	2	2					1	1		358
Pharyngitis.....	3	2	10	12	1	2						332
Proctitis.....		1	4	5								115
Pyorrhœa alveolaris.....	1	1	1	2	1							134
Stomatitis.....		1	8	9								4,120
Tonsillitis.....	12	25	347	357	6	1				20		96
Ulcus duodenum.....		1	2	1		1						286
Ulcus gastricum.....		1	5	3		1						213
Other diseases of this class.....	1	1	6	7			1					
<i>Subsidiary class 2.—Diseases of the circulatory system—</i>												
A.—Blood vessels—												
Aneurysma.....		2	2	2		1				1		133
Angina pectoris.....		1	2	2		1						41
Arteriosclerosis.....			2	1						1		26
Cordis dilatatio.....		2	3		2	1			2			150
Cordis hypertrophia.....			4	1	1	2						176
Cordis palpitatio.....	6	6	51	25	6	2	1				2	1,873
Cordis valvularum morbus.....	11	22	46	23	8	39				3	6	2,286
Endocarditis.....		4	8	3	1	3	1			3	1	454
Myocarditis.....		1	1			2						84
Phlebitis.....	3	1	9	9		2					2	465
Thrombosis.....			2	1		1						98
Varix.....	5	1	30	27	1	3					5	1,129
B.—Lymphatics—												
Lymphadenitis.....	7	7	45	49	5		1				4	2,224
Lymphangitis.....	1		4	4							1	155
Other diseases of this class.....	1	1		1		1						205
<i>Subsidiary class 3.—Diseases of the respiratory system—</i>												
Asthma.....	2	2	21	12	1	8					4	1,001
Bronchopneumonitis.....		2	11	10						1	2	352

12. Detailed statement, 1909—Continued.

NAVAL HOSPITALS AND HOSPITAL SHIPS—Continued.

Diseases.	Remaining from last year.	Admitted.	Re-admitted.	Discharged to duty.	Invalided.					Died.	Continued to next year.	Total number of sick days.
					To hospital.	From service.	On leave.	To Hospital for Insane.	Deserted.			
CLASS VIII.—DISEASES OF THE NUTRITIVE APPARATUS—Con.												
<i>Subsidiary class 5.—Diseases of the respiratory system—Cont'd.</i>												
Bronchitis acuta.....	9	11	88	88	8	3					9	1,757
Bronchitis chronica.....	7	4	58	47	8	9			1		4	2,641
Hæmoptysis.....		1	5	5	1							72
Laryngitis acuta.....	1	2	12	12	2	1						303
Laryngitis chronica.....	1		4	2		1						288
Pleuritis acuta.....	2	5	48	41	5		2		1		6	2,276
Pleuritis chronica.....	1	4	15	10	5	4						706
Pleuritis purulenta.....	4	5	5	12	1						1	1,812
Other disease of this class.....	2		1	3								102
CLASS IX: Diseases of the organs of locomotion—												
Ankylosis.....			3			2					1	102
Arthritis.....	3	2	28	17	5	6					5	1,579
Arthritis deformans.....		1				1						25
Bursitis.....		1	11	8	1	1						448
Caries.....			1	1								38
Contractura.....			6	2	2	1	1					116
Ganglion.....		1		1								1
Myalgia acuta.....	1	2	32	33	1						1	1,166
Myalgia chronica.....	4	1	31	23	4	6	2					1,199
Necrosis.....	1		6	4	1				1		1	449
Osteitis.....			3	1								321
Osteomyelitis.....	1	1										412
Periostitis.....	3		16	13	1	2					3	899
Pes planus.....	1	8	27	10	2	18						1,228
Synovitis.....	5	1	28	23	2	3	2		1		3	1,487
Thecitis.....		1	2	2							1	29
Other diseases of this class.....	2	1	7	4	2	4						644
CLASS X: Diseases of the skin and connective tissue—												
Abscessus.....	14	13	103	95	11	5			1		18	5,973
Acne.....			3	2								79
Carbunculus.....			7	6								229
Cellulitis.....	3	2	28	28	1					2	2	1,048
Clavus.....		1	1	1								26
Cutis fissure.....			1	1								58
Dermatitis venenata.....			4	4								62
Eczema.....		2	13	7	2						6	503
Erythema.....		3	1	4								17
Furunculosis.....	2	1	12	14	1							289
Impetigo contagiosa.....		2		2								39
Lupus.....	1		3	2	2							326
Miliaria papulosa.....			3	3								16
Pedunculosis.....			3	3								9
Pemphigus.....		1		1								19
Pityriasis.....		2	1	3								44
Prurigo.....		1		1								17
Psoriasis.....			1	1								87
Scabies.....	4	8	163	159	4	1					11	3,207
Trichophytosis.....	2	1	8	10								372
Ulcus.....	5	3	35	30	4	1	2				6	1,956
Unguis involutus.....		1	11	9	1	1			1			379
Urticaria.....		1	2	2		1						72
Verruca.....			1	1								46
Other diseases of this class.....		1	4	5								113
CLASS XI: Venereal diseases—												
Adentitis inguinalis.....	27	8	176	170	9	8			1		23	9,450
Arthritis gonorrhœa.....	26	22	116	67	8	57			2		30	8,416
Chancroid.....	16	11	57	67	6	2			3		6	3,359
Epididymitis.....	2	8	76	72	1	1			1		11	2,738

12. Detailed statement, 1909—Continued.

NAVAL HOSPITALS AND HOSPITAL SHIPS—Continued.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.				Deserted.	Died.	Continued to next year.	Total number of sick days.
					To hospital.	From service.	On leave.	To Hospital for Insane.				
CLASS XI—Continued.												
<i>Veneral diseases—Continued.</i>												
Fistula urinaria.....			3	2							1	181
Gonorrhoea.....	31	97	275	329	5	20			2		47	15,451
Ophthalmia gonorrhoeica.....	3		20	18	2	2					1	614
Orchitis.....	11	6	82	84	8	2			1		4	3,244
Prostatitis.....	1		3	2	1	1						133
Syphilis consecutiva.....	81	126	530	487	35	124	1		1	5	84	36,465
Syphilis primitiva.....	10	6	35	41	2	3			1		4	2,655
Urethra strictura.....	1	4	23	23	1				1		3	976
Verruca acuminata.....	3	3	12	14		1			1		3	387
Other diseases of this class.....	3		11	11		2					1	483
CLASS XII:												
<i>Diseases of the genito-urinary apparatus (non-venereal)—</i>												
Balanitis.....	1		1	2								127
Cystitis.....	6	3	11	12	2	4			1		1	780
Enurecis.....	2		17	11	1	6					1	599
Hæmaturia.....			3	2						1		167
Hydrocele.....	5	4	21	22	1	5					2	1,310
Nephritis acuta.....	4	1	21	10	5	2				2	7	1,191
Nephritis chronica.....	4	14	23	12	4	11	1			8	5	1,598
Nephrothiasis.....		5	3	4		1	1				2	287
Paraphimosis.....			3	2							1	80
Perinephritis.....		1		1								56
Phimosiis.....	4	6	44	52	1						1	950
Pyelitis.....		1	4	3						1	1	255
Urethritis simplex.....			1	1								14
Urine incontinentia.....			3	1		2						139
Urinae retentio.....			1	1								20
Varicocele.....	12	10	174	165	8	7					16	6,233
Other diseases of this class.....	3	2	6	6	2	2					1	749
CLASS XIII:												
<i>Cysts and new growths—</i>												
Adenoma.....	1		1	1		1						61
Carcinoma.....		3	6	3	4					2		206
Cystis.....		2	6	8								288
Epithelioma.....			3	2	1							130
Fibroma.....		1	5	5	1							132
Lipoma.....		2	3	2	1	1					1	93
Osteoma.....			4	4								102
Sarcoma.....	1	1	2	1						2	1	427
Other diseases of this class.....			2	2								65
CLASS XIV:												
<i>Injuries—</i>												
Abrasio.....		1	1	2								24
Ambustio ex calore.....	3	4	19	20		2				1	3	1,184
Ambustio ex electricitate.....			1	1								7
Ambustio ex venenis.....			3	1							2	83
Asphyxia.....		1		1								82
Asphyxia ex submersione.....		3	1							4		4
Cartilaginis intra-articularis dislocatio.....			4	3		1						159
Concusio.....	1		4	4		1						72
Contusio.....	5	2	29	25	4	3					4	838
Deformitas.....	9	6	62	46	5	91					5	3,038
Dislocatio.....	6	3	23	23	3	3	1				2	1,239
Fractura.....	34	15	142	119	13	19	2		2	2	34	10,645
Hernia.....	22	11	266	209	15	25	10		2		38	10,960
Membri clades.....		2	4	1	3						2	278
Musculi ruptio.....		1	1	1		1						47
Visceris ruptio.....			3	2	1							355
Stremma.....	5	11	48	53	3	3				5		1,927
Virium defectio.....		1	1	1		1						158
Vulnus contusum.....	1		12	10	2	1					1	490
Vulnus incisum.....	1	1	13	13		1				1		288
Vulnus infectum.....			15	13						2		359

12. Detailed statement, 1909—Continued.

NAVAL HOSPITALS AND HOSPITAL SHIPS—Continued.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.				Deserted.	Died.	Continued to next year.	Total number of sick days.
					To hospital.	From service.	On leave.	To Hospital for Infirmity.				
CLASS XIV—Continued.												
<i>Injuries—Continued.</i>												
Vulnus laceratum.....	1	3	31	21	2	2					10	1,926
Vulnus punctum.....	2		11	9		2					2	392
Vulnus scopeticum.....		2	17	12		2	1			2	2	1,003
Other diseases of this class.....			4	2		2						176
CLASS XV:												
<i>Extraneous bodies—</i>												
Corpus extraneum.....	1		3	3	1							80
CLASS XVI:												
<i>Poisons—</i>												
Alcoholismus.....		7	70	65	7	3				2		785
Venenum irritans.....		2	1	3								30
Venenum neuroticum.....	2	2	9	4	2	5		1	1			277
Vulnus venenatum.....	4	1	7	12								596
Other diseases of this class.....			7	4		3						149
CLASS XVII:												
<i>Feigned diseases—</i>												
Astigmatismus.....			2	2								15
Contusio.....			1	1								30
Otitis media.....			1	1								32
Cephalalgia.....			1	1								11
Myalgia acuta.....			1	1								11
Arthritis gonorrhoeica.....			3	3								37
Total.....	721	1,204	8,015	7,247	805	833	71	67	40	104	773	316,274

13. Report of vaccinations in the Navy and Marine Corps for the year 1909.

Classification.	Successful.	Unsuccessful.	Undetermined.	Percentage of success. ^a
Class I.—No evidence of previous vaccination.....	1,887	1,988	755	40.75
Class II.—Evidence of previous vaccination.....	5,775	12,113	1,679	29.51
Class III.—Evidence of having had smallpox.....	16	173	4	8.29
Total.....	7,678	14,274	2,438	31.48

^a Based upon results that were determined.

XIV

PREVALENCE OF SPECIAL DISEASES
AND INJURIES
IN THE NAVY AND MARINE CORPS DURING YEAR 1909.

DISEASE	RELATION BY SCALE.	NUMBER ADMISSIONS
CONORRHEA		5061
TONSILLITIS		3428
SUPPURATIVE SKIN DISEASES		1872
CHANCROID		1573
WOUNDS		1570
SYPHILIS		1476
EPIDEMIC CATARRH		1225
BRONCHIAL AFFECTIONS		1060
MALARIA		1046
ADENITIS & LYMPHADENITIS		976
MUMPS		961
EPIDIDYMITIS & ORCHITIS		952
SPRAINS		936
RHEUMATIC AFFECTIONS		925
MEASLES		753
FRACTURES		507
DENGUE		489
DIARRHOEAL AFFECTIONS		457
APPENDICITIS		375
ALCOHOLISM		350
HERNIA		346
SCABIES		324
GASTRIC CATARRH		318
BURNS		311
DISEASES OF MIDDLE EAR		302
TUBERCULOSIS		301
HAEMORRHOIDS		290
HEART DISEASE		225
PNEUMONIA		205
TYPHOID FEVER		189
HEAT AFFECTIONS		155
PLEURISY		155
MENTAL DISEASES		142
NEURASTHENIA		142
DYSENTERY		127
TOTAL		30,324

15. Mortuary record for the Navy and Marine Corps for the year 1909.

Causes of death.	Where deaths occurred.				Total.
	Hospitals and hospital ships.	Yards, barracks, stations, receiving and station ships.	Cruising ships.	Elsewhere.	
Abscessus.....			1		1
Alcoholismus.....	2	2			9
Ambustio ex calore.....	1		5		4
Anæmia chronica.....	1		3		1
Aneurysma.....	1			1	5
Apoplexia.....		3	1		4
Appendicitis.....	6	1			7
Arteriosclerosis.....	1		1		2
Asphyxia.....		1	5		6
Asphyxia ex submersione.....	4	15	30	2	51
Bronchopneumonitis.....	1		1		2
Carcinoma.....	2			1	3
Cellulitis.....	2				2
Concussio.....			1		1
Cordis dilatatio.....	2	1	2		5
Cordis inhibitio.....			1		1
Cordis valvularum morbus.....	3				3
Dementia.....				1	1
Diabetes mellitus.....	2				2
Diphtheria.....	1				1
Dislocatio.....		1			1
Dysenteria infectiva.....			1		1
Encephalitis.....	1				1
Endocarditis.....	3				3
Erysipelas.....	1		1		1
Febris cerebro-spinalis.....		2			2
Febris pneumonica.....	11	1	4	1	17
Febris typhoides.....	13	1	2	1	17
Fractura.....	2	4	7		13
Gangrena acuta.....	1				1
Hæmaturia.....	1				1
Hæmorrhagia cerebelli.....			1		1
Hepatitis acuta.....			1		1
Hepatitis chronica.....	2				2
Hepatitis suppurativa.....	1				1
Nephritis acuta.....	3	1	1		5
Nephritis chronica.....	7	1	2		10
Obstructio intestinalis.....	1	1			2
Paralysis ascendens acuta.....	1				1
Peritonitis.....	1				1
Pleuritis purulenta.....		2		1	3
Pyæmia.....	2				2
Pyelitis.....	1				1
Sarcoma.....	2				2
Scarlatina.....	3				3
Syphilis consecutiva.....	5				5
Thrombosis.....			1		1
Tuberculosis miliaris acuta.....	3		1		4
Tuberculosis pneumonica ^a	31	2		1	34
Tuberculosis of other parts.....	1	1			2
Urinæ suppressio.....		1	1		2
Variola.....	3		1		4
Venenum irritans.....		1	2		3
Venenum neurotoicum.....		2		1	3
Visceris ruptio.....			1		1
Volvulus.....				1	1
Vulnus incisum.....	1	1	1		3
Vulnus incertum.....			1	1	2
Vulnus sclopeticum.....	2	7	6	2	17
Vulnus venenatum.....			1		1
Total.....	132	52	88	14	286

^a Includes 27 deaths at Naval Hospital, Las Animas, Colo., and 1 at the Government Hospital for the Insane.

17. General aggregate, 1909.

FORCE AFLOAT, YARDS, STATIONS, MARINE BARRACKS, HOSPITALS, ETC.

Classification of diseases.	Remaining from last year.	Admitted.	Remitted.	Discharged to duty.	Invalided.					Continued to next year.	Total number of sick days.	Damage, in terms of percentage of sick.	
					To hospital.	From service.	On leave	To Hospital for Insane.	Deserted.				Died.
CLASS I.													
Parasitic infections (animal)		38	9	43	4							397	0.001973
CLASS II.													
General infective diseases..	197	6,497	3,078	6,632	2,782	69	13	6	58	210	110,141	638398	
CLASS III.													
Constitutional disorders of nutrition:													
Subsidiary Class 1.—													
General diseases of nutrition													
	3	18	17	9	15	10	1		2	1	561	.018276	
Subsidiary Class 2.—													
Diseases of the blood													
	2	40	9	34	9	4	2		1	1	861	.008649	
Subsidiary Class 3.—													
Diseases of the ductless glands													
		13	5	8	5	5					207	.005398	
CLASS IV.													
Diseases of the nervous system.....	45	1,011	515	840	387	192	17	82	7	7	39	19,285	0.341440
CLASS V.													
Diseases of the visual apparatus.....	21	831	338	819	239	100	9		1		25	13,137	.152690
CLASS VI.													
Diseases of the auditory apparatus.....	15	563	219	425	176	113					23	8,812	.142557
CLASS VII.													
Diseases of the olfactory apparatus.....	7	198	29	199	26	6					3	1,190	.011158
CLASS VIII.													
Diseases of the nutritive apparatus:													
Subsidiary Class 1.—													
Diseases of the digestive system.....													
	134	6,284	1,254	6,388	1,063	46	14		4	14	143	53,377	.317723
Subsidiary Class 2.—													
Diseases of the circulatory system.....													
	53	659	298	493	229	224	4		19	32	14,577	.284829	
Subsidiary Class 3.—													
Diseases of the respiratory system.....													
	47	1,499	344	1,399	299	42	3		3	4	51	19,118	.135230
CLASS IX.													
Diseases of the organs of locomotion	31	891	292	800	217	150	5		2		43	16,222	.211723
CLASS X													
Diseases of the skin and connective tissue.....	96	2,908	552	3,018	420	20	2		2	3	82	33,877	.188470

* Invaliding to "Hospital for Insane" has damage value equivalent to invaliding from service.

17. *General aggregate, 1909*—Continued.

FORCE AFLOAT, YARDS, STATIONS, MARINE BARRACKS, HOSPITALS, ETC.—Cont'd.

Classification of diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.				Deserted.	Died.	Continued to next year.	Total number of sick days.	Damage in terms of percentage of sick.
					To hospital.	From service.	On leave.	To Hospital for Insane.					
CLASS XI.													
Veneral diseases.....	298	11,664	2,521	11,790	1,466	285	2	14	5	321	130,396	0.946258	
CLASS XII.													
Diseases of the genito-urinary apparatus.....	59	903	398	867	356	71	2	2	13	44	20,211	.178234	
CLASS XIII.													
Cysts and new growths....	2	88	35	75	40	4				2	1,876	.016320	
CLASS XIV.													
Injuries.....	180	4,879	936	4,707	756	218	15	7	94	198	72,865	.634827	
CLASS XV.													
Extraneous bodies.....	1	33	3	33	4						171	.000849	
CLASS XVI.													
Poisons.....	13	472	125	474	99	17	1	1	15	3	3,456	.046018	
CLASS XVII.													
Fetigned diseases.....		5	9	14							149	.000733	
Total.....	1,210	38,735	10,986	39,067	8,001	1,576	90	33	49	244	1,221	529,886	4.290755

* Invaliding to "Hospital for Insane" has damage value equivalent to invaliding from service.

18. Detailed statement, 1909.

FORCE AFLOAT, YARDS, STATIONS, MARINE BARRACKS, HOSPITALS, ETC.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.					Continued to next year.	Total number of sick days.	Damages in terms of percentage of sick.	
					To hospital.	From service.	On leave.	To Hospital for Insane.	Deserted.				Died.
CLASS I:													
<i>Parasitic infections (animal)—</i>													
Ankylostomiasis.....		9		9								104	0.000516
Ascariasis.....		8	1	8	1							179	.000889
Oxyuriasis.....		1		1								3	.000014
Teniasis.....		18	8	23	3							99	.000492
Trichiniasis.....		1		1								3	.000014
Other diseases of this class.....		1		1								9	.000044
CLASS II:													
<i>General infective diseases (non-venereal)—</i>													
Catarrhus epidemius ..	8	1,225	101	1,236	77	1	1				19	6,462	.032744
Denguis.....	4	489	138	508	120						3	2,664	.012798
Diphtheria.....	1	29	14	25	14	1					1	3	.005590
Dysenteria amœbica.....	8	58	35	66	25	2	1				7	2,611	.014543
Dysenteria infectiva (bacillary).....		18	4	15	6					1		179	.001754
Dysenteria (undefined).....	3	46	21	49	17	3				1	1	1,198	.008530
Enteritis flagellata.....		3	6	8	1							64	.000315
Enteritis infectiva.....		2	1	2	1							32	.000157
Erysipelas.....	1	25	11	22	11		1			1	2	509	.003364
Febris cerebro-spinalis.....		11	2	9	2					2		416	.003799
Febris mellitensis.....	1			1								40	.000191
Febris pneumonica.....	7	205	97	163	110		1	2		16	17	5,519	.042259
Febris recurrens.....		17	6	20	5							109	.000537
Febris rheumatica.....	20	332	180	348	145	13			2		24	9,835	.058866
Febris typhoides.....	9	189	139	145	147		9			16	20	10,378	.065108
Framboesia.....	1					1						61	.001175
Gangrana acuta infectiva.....		1	1		1					1		1	.000878
Malaria—													
(a) Cachexia malarialis.....	6	26	20	35	14	2				1		754	.005486
(b) Febris æstivo-autumnalis.....	5	115	40	153	6					1		1,080	.005367
(c) Febris hæmoglobinurica.....		23	2	25								214	.001064
(d) Febris quartana.....	1	13	7	20	1							211	.001048
(e) Febris tertiana.....	23	870	525	1,152	248	1			1		16	10,670	.053903
Morbilli.....	2	494	492	553	421	1					13	9,686	.048335
Paralysys ascendens acuta.....		1	1		1					1		10	.000923
Parotiditis epidemica.....	40	961	511	990	507				3		12	17,765	.088202
Pertussis.....		3	1	3	1							126	.000604
Pyæmia.....		2								2		6	.001788
Pyrexia ortus incerti.....		289	89	282	88					8		2,083	.009981
Rheumatismus articularis chronicus.....	15	177	121	195	91	14	1				12	6,619	.044031
Rubella.....	1	259	151	241	160						10	3,485	.016603
Scarlatina.....	1	95	69	86	68	1				3	7	3,669	.021731
Septicæmia.....	2	3	4	3	5	1						645	.004050
Tuberculosis miliaris acuta.....		18	7	4	12	4				4	1	470	.000327
Tuberculosis pneumonica.....	28	276	255	79	430	21				5	24	9,189	.068303
Tuberculosis of other parts.....	4	17	7	10	12	2				2	2	909	.008014
Vaccinia.....		131	2	128	3							2	.000043
Varicella.....	1	30	11	24	14						4	445	.002217
Variole.....	1	13	1	6	5							289	.004733
Other diseases of this class.....	2	28	7	23	13					1		324	.001610

18. Detailed statement, 1909—Continued.

FORCE AFLOAT, YARDS, STATIONS, MARINE BARRACKS, HOSPITALS, ETC.—Cont'd.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.					Total number of sick days.	Damage in terms of percentage of sick.	
					To hospital.	From service.	On leave.	To Hospital for Insane.	Deserted.			Died.	Con tinued to next year.
CLASS III.—CONSTITUTIONAL DISORDERS OF NUTRITION:												
<i>Subsidiary Class 1.—General diseases of nutrition—</i>												
Diabetes insipidus.....		2	1	1	2						98	0.000486
Diabetes mellitus.....		6	8	2	6	3	1		2		278	.005752
Hæmophilia.....		1				1					6	.000914
Lithæmia.....		2	1		2	1					38	.001061
Obesitas.....		2	1	1		2					4	.001768
Pupura.....	1	1	1	1	2						9	.000044
Other diseases of this class.....	2	4	5	4	3	3			1		128	.003258
<i>Subsidiary class 2.—Diseases of the blood—</i>												
Anæmia chronica splenica.....			1						1		101	.001375
Anæmia perniciosa.....		1	1		1		1				71	.006352
Anæmia simplex.....	2	36	7	32	8	4	1				504	.006001
Leucocythæmia.....		3		2					1		185	.000919
<i>Subsidiary class 3.—Diseases of the ductless glands—</i>												
Bronchocele.....		13	5	8	5	5					207	.005398
CLASS IV: Diseases of the nervous system—												
Apoplexia.....		4							4		4	.003515
Aphasia.....		2	1	1	1	1					66	.001202
Atrophia muscularis progressiva.....						1						
Cephalalgia.....	1	106	20	110	13	1	1		1		711	.004407
Chorea.....		6	8	4	6	2			2		115	.002319
Dementia.....	2	75	63	19	57	16		44	4	1,850	1,850	.061634
Encephalitis.....		1							1		1	.000878
Epilepsia.....	5	79	66	45	35	63		1	1	5	1,841	.065085
Febris thermica.....		40	1	41							208	.001033
Hæmorrhagia cerebelli.....		1							1		1	.000878
Hemicrania.....				2							10	.000923
Hemiplegia.....	3	12	8	8	8	5			2		766	.008177
Insomnia.....	1	11	2	10	1	2			1		104	.000516
Mania.....	1	13	12	6	9	2		7	2		322	.009516
Melancholia.....	2	38	38	13	35	11	1	14	1	3	929	.026467
Meningitis.....		2	1	2	1						54	.006298
Monoplegia.....		2	8	2	6	2					245	.002965
Myelitis.....	1			1							17	.000084
Nausea marina.....	2	45	24	55	5	10			1		283	.010146
Neuralgia.....	2	115	24	119	17	2	1		2		863	.006037
Neurasthenia.....	4	142	117	112	97	36	8		2		4,670	.054673
Neuritis.....	7	32	19	36	18	3			1		1,579	.010469
Neuritis multiplex.....		2	4	2	3	1			1		281	.002270
Nostalgia.....		2		2							9	.000044
Paralysis agitans.....		1	1		1	1					18	.000963
Paralysis insanorum generalis.....		3	2		2			3			82	.003029
Paranoia.....	1	16	20	5	17	2		12		1	409	.014268
Paraplegia.....		2	1	1	1					1	24	.000119
Prostratio thermica.....	3	106	11	111	6	3					470	.004957
Sciatica.....		29	15	29	13				2		815	.004050
Sclerosis spinalis lateralis spastica.....		1			1						3	.000014
Sclerosis spinalis multiplex.....			1			1					31	.001028
Sclerosis spinalis posterior.....	2	6	4	4	4	3			1		380	.004510
Torticollis spasmodica.....		9	1	8	1	1					87	.001306
Vertigo.....	1	45	18	48	10	2	2		1		444	.003954
Other diseases of this class.....	7	60	24	44	18	24	2	1	2	1,573	1,573	.029667

* Invaliding "to Hospital for Insane" has damage value equivalent to invaliding "from service."

18. Detailed statement, 1909—Continued.

FORCE AFLOAT, YARDS, STATIONS, MARINE BARRACKS, HOSPITALS, ETC.—Con'd

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalidled.				Continued to next year.	Total number of sick days.	Damage in terms of per centage of sick.	
					To hospital.	From service.	On leave.	To Hospital for In- sane.				Deserted.	Died.
CLASS V:												
<i>Diseases of the visual apparatus—</i>												
Achromatopsia.....		14	4	4	2	12				112	0.011044	
Amaurosis.....		2		2						9	.000044	
Amblyopia.....		20	19	11	17	10			1	735	.012392	
Asthenopia.....	1	79	44	86	27	8	3			1,038	.012150	
Astigmatismus.....	1	104	39	100	28	12			4	702	.013976	
Biopharitis.....		7	1	6	2	1				24	.000119	
Cataracta.....	1	8	6	10	4	1				223	.001982	
Chalazion.....		3	2	4	1					92	.000487	
Choroiditis.....		4	4	2	3	2	1			208	.002781	
Conjunctivitis.....	4	253	39	258	23	7	2		6	1,689	.014512	
Corneæ ulcus.....	1	24	6	24	5	1			1	437	.003045	
Dacryocystitis.....		5	5	5	4	1				207	.001902	
Ectropium.....	1	1	1	1	1					58	.000288	
Glaucoma.....		2	1	2	1					40	.000198	
Hordeolum.....		17	1	18						50	.000248	
Hypermetropia.....	3	39	13	39	9	6			1	343	.006948	
Iritis.....	3	43	12	44	9	2			3	916	.006300	
Keratitis.....	2	29	6	28	5	3	1			770	.006448	
Leucoma.....		3	2	5						114	.000556	
Myopia.....		86	61	88	37	20			2	1,051	.022708	
Neuritis optica.....	1	8	4	3	3	3	1		3	936	.007273	
Obstructio lacrimalis.....		5	2	4	2				1	192	.000954	
Pterygium.....	2	33	26	35	24	1			1	886	.005277	
Retinitis.....	3	15	15	12	13	6	1		1	951	.009970	
Scleroditis.....		1		1						4	.000019	
Synechia.....		1		1						2	.000009	
Trachoma.....	2	13	9	11	10	1		1	1	811	.004904	
Other diseases of this class.....		12	16	15	9	4				537	.006164	
CLASS VI:												
<i>Diseases of the auditory apparatus—</i>												
Mastoiditis.....		13	9	10	9	1			2	305	.002389	
Myringitis.....		11	1	11	1					78	.000387	
Membrana tympani rupta.....		25	4	23	2	4				187	.004425	
Otitis.....		4		4						9	.000044	
Otitis externa.....		79	25	82	17	1			4	747	.004586	
Otitis media.....	10	302	153	258	125	68			14	5,811	.088312	
Surditas.....	5	64	25	32	20	39			3	1,645	.042261	
Vertigo (auralis).....		3	2	3	2					5	.000024	
Other diseases of this class.....		2		2						25	.000124	
CLASS VII:												
<i>Diseases of the olfactory apparatus—</i>												
Antri abscessus.....	1	2		2	1					45	.000223	
Catarrhus æstivus.....		2		2						5	.000024	
Rhinitis acuta.....		155	2	153	3				1	461	.002291	
Rhinitis chronica.....	5	29	21	30	17	6			2	531	.007883	
Other diseases of this class.....	1	10	6	12	5					148	.000735	
CLASS VIII. DISEASES OF THE NUTRITIVE APPARATUS:												
<i>Subdivisiõ class I. Diseases of the digestive system</i>												
Alopecia salivosa.....		6		5	1					30	.000149	
Ani prolapsio.....		5	2	1	3	1				108	.001409	
Ani rhagades.....		6	6	7	5					170	.000844	
Aphthæ.....		3		2						25	.000124	
Appendicitis.....	38	375	277	375	250	11	10	1	7	36	13,183	.081251
Catarrhus gastricus acutus.....	2	265	27	274	18		1		1	1,283	.006128	
Catarrhus gastricus chronicus.....	5	53	39	55	33	6	1		2	2,165	.016249	

18. Detailed statement, 1909—Continued.

FORCE AFLOAT, YARDS, STATIONS, MARINE BARRACKS, HOSPITALS, ETC.—Cont'd.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.					Continued to next year.	Total number of sick days.	Damage in terms of percentage of sick.		
					To hospital.	From service.	On leave.	To Hospital for Insane.	Deserted.				Died.	
CLASS VIII.—DISEASES OF THE NUTRITIVE APPARATUS—Continued.														
<i>Subsidiary class 1.—Diseases of the digestive system—Continued.</i>														
Catarrhus intestinalis acutus.....	7	430	29	446	25						4	1,847	0.009179	
Catarrhus intestinalis chronicus.....		18	11	18	8	1					2	524	.003473	
Cholangitis.....		3		3								15	.000074	
Cholecystitis.....	1	10	7	11	5						2	434	.002156	
Cholelithiasis.....		7	8	7	6	2						365	.003562	
Colica.....	1	280	23	287	15						2	933	.004587	
Colitis.....		30	4	22	2							115	.000371	
Constipatio.....	2	166	3	171	4						1	678	.003309	
Dyspepsia nervosa.....		20	1	16	1	4						109	.004037	
Enteritis.....		10	3	9	3							125	.000621	
Enteroposis.....		170	16	181	9						2	765	.003802	
Fistula in ano.....	7	43	31	43	33	2					3	1,422	.008815	
Gastralgia.....		15	3	14	3	1						111	.001425	
Gastroectasis.....		2	1	3								26	.000129	
Hæmatemesis.....		2		2								8	.000039	
Hæmorrhoids.....	11	250	193	289	180	9			1		15	5,254	.033978	
Hepatis congestio.....	1	21		19	3							88	.000437	
Hepatitis acuta.....		5	4	6	2				1			159	.001664	
Hepatitis chronica.....	2	5	2	3	2	1			2	1		416	.004689	
Hepatitis suppurativa.....	1	4	1	3	1				1	1		207	.001902	
Hypertrophia tonsillarum.....	1	34	24	32	25	1					1	528	.003408	
Icterus.....	2	139	42	148	32				1		2	2,232	.011092	
Obstructio intestinalis.....		6	1	3	1					2	1	59	.002041	
Œsophagostenosis.....		1	1	1	1							4	.000019	
Pancreatitis.....		1	1	1	1							1	.000094	
Parulis.....		6		6								31	.000154	
Periproctitis.....		4		4								24	.000119	
Peritonitis.....		6	2	3	3					1	1	108	.001409	
Pharyngitis.....	5	85	10	87	11	2						450	.004078	
Proctitis.....		6	4	6	4							339	.001684	
Pyorrhœa alveolaris.....	1	14	3	14	3						1	162	.000405	
Stomatitis.....		257	9	251	12						2	1,283	.006376	
Tonsillitis.....	46	3,428	445	3,513	345	3			1		58	16,634	.085392	
Ulcus duodenum.....		3	2	1	2							1	102	.000306
Ulcus gastricum.....		8	6	5	6	1					2	296	.002345	
Other diseases of this class.....	1	36	6	38	3	1	1					325	.002489	
<i>Subsidiary class 2.—Diseases of the circulatory system—</i>														
A—Blood vessels—														
Aneurysma.....		8	2	3	2	1					4	165	.005190	
Angina pectoris.....	1	9	2	9	2	1						127	.001505	
Arteriosclerosis.....		5	3	3	2	1				2		50	.002870	
Cordis dilatatio.....		14	6	4	4	6				5		218	.010367	
Cordis hypertrophia.....		19	6	9	9	7						260	.007409	
Cordis inhibitio.....		1									1	1	.000878	
Cordis palpitatio.....	9	116	89	107	54	48	1				4	2,717	.035455	
Cordis valvularum morbus.....	15	166	63	57	50	124	1			3	9	3,311	.127453	
Endocarditis.....		13	10	4	9	5	1			3	1	400	.010018	
Myocarditis.....		3	2	1		4						101	.003997	
Phlebitis.....	3	17	11	18	9	2					2	503	.004247	
Thrombosis.....		2	3	1	1	2				1		121	.003223	
Varix.....	6	56	42	48	32	19					5	1,523	.024175	
B—Lymphatics—														
Lymphadenitis.....	15	180	54	186	49	3	1				10	4,179	.023391	
Lymphangitis.....	3	32	6	36	4						1	428	.002127	
Other diseases of this class.....	1	9		7	2	1						264	.002186	

18. Detailed statement, 1909—Continued.

FORCE AFLOAT, YARDS, STATIONS, MARINE BARRACKS, HOSPITALS, ETC.—Cont'd.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.					Continued to next year.	Total number of sick days.	Damage in terms of percentage of sick.		
					To hospital.	From service.	On leave.	To Hospital for In- same.	Deserted.				Died.	
CLASS VIII.—DISEASES OF THE NUTRITIVE APPARATUS—Continued.														
<i>Subsidiary class 3.—Diseases of the respiratory system—</i>														
Asthma.....	5	43	45	54	21	14					4	1,596	0.020168	
Bronchopneumonitis...	2	40	12	37	12					2	3	800	.005724	
Bronchitis acuta.....	16	949	111	955	96	3				1	21	6,568	.035215	
Bronchitis chronica.....	9	111	76	105	67	18			1		5	3,412	.032689	
Hæmoptysis.....		10	7	10	6							1	112	.000556
Laryngitis acuta.....	2	72	14	75	11	1					1	671	.004208	
Laryngitis chronica.....	1	9	4	5	6	1					2	326	.002464	
Pleuritis acuta.....	2	121	53	108	54	2			1		11	3,067	.015392	
Pleuritis chronica.....	2	23	15	17	18	4					1	797	.007457	
Pleuritis purulenta.....	5	11	6	13	4	1			2		2	1,512	.010136	
Other diseases of this class.....	3	20	1	20	4							237	.001177	
CLASS IX: Diseases of the organs of locomotion—														
Ankylosis.....		6	3	3	3	2					1	108	.002284	
Arthritis.....	5	99	41	90	32	14					9	2,581	.025963	
Arthritis deformans.....		2			1	1						37	.001057	
Bursitis.....	2	35	15	35	12	2					3	688	.005167	
Caries.....		2	1	2	1							41	.002203	
Contractura.....		11	7	5	6	6	1					307	.006272	
Ganglion.....		2		2								18	.000689	
Myalgia acuta.....	6	354	55	375	35						5	2,838	.014104	
Myalgia chronica.....	4	62	38	60	33	8	2				1	1,774	.015808	
Necrosis.....	1	8	6	6	7				1		1	465	.002311	
Osteitis.....		4	3	1	3	1					2	325	.002489	
Osteomyelitis.....	1	4									2	412	.002047	
Periostitis.....	3	29	18	27	17	2					4	1,170	.007562	
Pes planus.....	2	148	51	63	27	104					7	2,463	.103286	
Synovitis.....	8	109	45	118	30	6	2		1		5	2,360	.016073	
Theclitis.....		12	2	9	2						3	59	.000293	
Other diseases of this class.....	2	7	7	4	8	4						646	.006706	
CLASS X: Diseases of the skin and connective tissue—														
Abscessus.....	37	1,010	140	1,035	108	5			1	1	37	13,066	.070182	
Acene.....		9	3	8	2	1					1	116	.001450	
Carbunculus.....	2	65	11	67	8						3	722	.006588	
Cellulitis.....	7	311	38	318	30	2				2	4	3,595	.021363	
Clavus.....		38	5	36	1	6						277	.006619	
Cutis fissura.....	1	7		8								132	.000656	
Dermatitis venenata.....		66	8	68	5						1	464	.002306	
Dysidrosis.....		1		1								20	.000099	
Ecthyma.....		3		3								10	.000049	
Eczema.....	1	80	25	81	15	2					8	1,169	.007557	
Erythema.....		23	2	24	1							117	.000581	
Favus.....		4		4								12	.000059	
Furunculus.....	8	372	35	404	10						1	2,198	.010924	
Herpes simplex.....	2	9		11	9							38	.000188	
Herpes zoster.....	2	28	2	32								183	.000909	
Impetigo contagiosa.....		15		14							1	117	.000581	
Lichen.....		2		2								41	.000203	
Lupus.....	1	2	4	3	4							380	.001679	
Oxychia.....		4	3	4	3							19	.000094	
Paronychia.....	1	60		61							1	65	.000323	
Pediculus.....		31	3	32	2							75	.000372	
Pemphigus.....	1	8		9								41	.000203	
Pernio.....		2		2								10	.000049	
Pityriasis.....		6	1	6	1							47	.000233	
Prurigo.....	2	2		2	1						1	97	.000482	
Pruritus.....		1		1								1	.000004	
Psoriasis.....		5	1	5	1							110	.000546	

18. Detailed statement, 1909—Continued.

FORCE AFLOAT, YARDS, STATIONS, MARINE BARRACKS, HOSPITALS, ETC.—Cont'd.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.				Deserted.	Died.	Continued to next year.	Total number of sick days.	Damage in terms of percentage of sick.	
					To hospital.	From service.	On leave.	To Hospital for In-same.						
CLASS X—Continued.														
<i>Diseases of the skin and connective tissue—Con.</i>														
Scabies.....	10	324	185	331	175	1					12	4,451	0.022995	
Scleroderma.....		1		1								1	.000004	
Trichophytosis.....	4	102	9	106	8						1	867	.004308	
Ulcus.....	12	114	51	133	32	1	2				9	3,263	.017091	
Unguis involutus.....	6	136	16	142	12	1					2	1,377	.007717	
Utricularia.....		30	3	38	3	1					1	211	.001922	
Verruca.....		13	1	11	3							98	.000487	
Other diseases of this class.....	1	10	4	11	4							150	.000790	
CLASS XI:														
<i>Veneral diseases—</i>														
Adenitis inguinalis.....	47	796	280	882	187	8			1		45	20,306	.107912	
Arthritis gonorrhoea.....	29	213	160	170	125	63			2		42	11,101	.110233	
Chancroid.....	25	1,573	157	1,660	68	3			3		21	9,539	.050029	
Epididymitis.....	15	481	137	534	76	1			1		21	7,924	.040251	
Fistula urinialis.....		4	5	5	3							1	232	.001153
Gonorrhoea.....	43	5,861	652	6,173	276	33			3		71	28,801	.171982	
Ophthalmia gonorrhoea.....	4	78	26	80	24	3					1	1,087	.008024	
Orchitis.....	23	471	146	537	86	4			1		12	8,109	.043797	
Prostatitis.....	1	12	3	12	3	1						247	.002101	
Syphilis consecutiva.....	94	1,312	856	1,450	547	163	2		1	5	94	45,733	.374125	
Syphilis primitiva.....	10	164	45	171	38	3			1		6	3,914	.022074	
Urethrae strictura.....	1	47	28	51	21				1		3	1,205	.005988	
Verruca acuminata.....	3	41	13	43	10	1					3	562	.003667	
Other diseases of this class.....	3	11	13	22	2	2					1	636	.004908	
CLASS XII:														
<i>Diseases of the genito-urinary apparatus (non-venereal)—</i>														
Balanitis.....	2	21	1	24								261	.001297	
Calculus.....		1		1								7	.000034	
Cystitis.....	8	69	13	62	19	5			1		3	1,418	.011417	
Diuresis.....		3		3								18	.000089	
Enuresis.....	3	37	25	26	17	21					1	862	.022638	
Glandulae prostatae hypertrophica.....		2		2								73	.000362	
Haematuria.....		8	3	6	3					1	1	238	.002056	
Hydrocele.....	5	37	23	40	17	6					2	1,520	.012798	
Nephritis acuta.....	5	38	24	31	23	2				4	7	1,542	.012907	
Nephritis chronica.....	4	48	28	28	24	11	1			11	5	1,788	.028114	
Nephrothiasis.....	1	14	7	15	3	1	1				2	364	.002683	
Nephropostis.....		1	1	1	1							1	.000004	
Paraphimosis.....	1	20	4	29	4						1	327	.002122	
Perinephritis.....		2		2								61	.003003	
Phimosis.....	12	281	55	295	49					1	4	2,660	.013219	
Pyelitis.....		8	6	9	3					1	1	323	.002479	
Urethritis simplex.....		3	1	3	1							23	.000114	
Urinae incontinentia.....		5	6	5	4	2						208	.002781	
Urinae suppressio.....		3		1		1				1		12	.001807	
Urinae retentio.....		9	1	9	1							96	.000477	
Varicocele.....	15	252	192	246	177	10			1		16	7,403	.053998	
Other diseases of this class.....	3	32	8	29	10	3					1	1,006	.006521	
CLASS XIII:														
<i>Cysts and new growths—</i>														
Adenoma.....	1	4	1	3	1	2						81	.002150	
Angioma.....				1								1	.000004	
Carcinoma.....	1	8	6	3	9					2		224	.002861	
Chondroma.....		1		1								1	.000004	
Cystis.....		31	7	31	7							419	.002082	
Epithelioma.....		6	3	5	4							152	.000755	
Fibroma.....		9	5	8	6							164	.000815	
Lipoma.....		14	3	10	5	1					1	162	.001689	
Osteoma.....		6	6	7	4	1						170	.001718	
Sarcoma.....	1	3	2	1	2					2	1	429	.003880	
Other diseases of this class.....		5	2	5	2							73	.000362	

18. Detailed statement, 1909—Continued.

FORCE AFLOAT, YARDS, STATIONS, MARINE BARRACKS, HOSPITALS, ETC.—Cont'd.

Diseases.	Remaining from last year.	Admitted.	Readmitted.	Discharged to duty.	Invalided.					Continued to next year.	Total number of sick days.	Damage in terms of percentage of sick.		
					To hospital.	From service.	On leave.	To Hospital for Insane.	Deserted.				Died.	
CLASS XIV:														
<i>Injuries—</i>														
Abrasio.....	1	90	4	94	1						465	0.002311		
Ambustio ex calore.....	12	294	24	290	19	2				4	6	3,283	.021560	
Ambustio ex electricitate.....		6	1	6	1							38	.000188	
Ambustio ex frigore.....		1		1								1	.000004	
Ambustio ex venenis.....		10	3	8	3						2	151	.000749	
Asphyxia.....		15		9							6	97	.005726	
Asphyxia ex submersione.....	1	52	1	4	1					49		74	.043193	
Cartilaginis intra-articularis dislocatio.....		8	5	8	4							219	.001962	
Concussio.....	1	57	7	57	6	1				1		402	.003745	
Contusio.....	16	727	51	740	34	6				14	14	5,010	.030143	
Deformitas.....	11	169	95	110	63	95				7	7	4,077	.103292	
Distocatio.....	7	95	39	109	22	4	1			1	4	2,400	.016298	
Fractura.....	47	507	159	465	151	24	3			4	13	53	18,020	.121897
Fulminis ictus.....		2	1	2	1							23	.000114	
Hernia.....	27	346	318	293	278	63	10			2		43	12,945	.119388
Ictus electricus.....		1		1								2	.000009	
Membri clades.....		14	6	9	5	3						3	622	.005713
Musculi ruptio.....		5	2	5	1	1						112	.001429	
Visceris ruptio.....		5	4	5	4							407	.002896	
Bolis ictus.....		9		9								25	.000124	
Streptima.....	20	936	79	961	52	4				1	17	7,440	.040472	
Virium defectio.....		5	1	2		4						183	.004405	
Vulnus contusum.....	3	209	14	208	15						3	1,848	.009184	
Vulnus incisum.....	8	242	14	246	12	1				3	2	1,990	.013386	
Vulnus infectum.....		249	26	247	18							10	2,047	.010173
Vulnus laceratum.....	20	662	43	658	36	2				1	28	8,428	.044509	
Vulnus punctum.....	3	91	14	96	7	2					3	844	.005942	
Vulnus sclopeticum.....	2	48	18	31	17	2	1			15	2	1,373	.021681	
Other diseases of this class.....		24	7	22	5	3					1	339	.004306	
CLASS XV:														
<i>Extraneous bodies—</i>														
Corpus extraneum.....	1	33	3	33	4							171	.000849	
CLASS XVI:														
<i>Poisons:</i>														
Alcoholismus.....	1	350	94	352	78	5				9	1	1,786	.021117	
Venenum irritans.....		25	1	22	1					3		101	.003123	
Venenum neuroticum.....	4	44	12	36	10	9			1	1	2	1	515	.013047
Vulnus venenatum.....	8	45	9	55	6					1		860	.005148	
Other diseases of this class.....		8	9	9	4	3					1	194	.003586	
CLASS XVII:														
<i>Frigid diseases—</i>														
Appendicitis.....		1		1								6	.000029	
Arthritis gonorrhoea.....			3	3								37	.000183	
Asthenismus.....			1	1								15	.000074	
Cephalalgia.....		1		1								11	.000054	
Contusio.....		1		1								30	.000049	
Dementia.....		1		1								1	.000004	
Diarrhea.....		1		1								2	.000009	
Melancholia.....		1		1								3	.000014	
Myalgia acuta.....			1	1								11	.000054	
Myopia.....		1		1								1	.000004	
Otitis media.....			1	1								32	.000159	
Total.....	1,210	38,735	10,986	39,067	8,601	1,576	90	83	49	244	1,221	529,886		

• Invaliding to "Hospital for Insane" has damage value equivalent to invaliding from service.

• Forty-two additional deaths occurred for which statistical reports were not received or incorporated in this table. (See tables Nos. 15, 16, and 19.)

19. Table to show distribution of disease among occupational groups of the person

Classes.	All officers (Navy and Marine).	Under- gradu- ate mid- ship- men.	Engi- neer- room force.	Fire- room force.	Seaman branch.			Com- missary and mess- branch- es.
					Gun- ner's mates and turret cap- tains.	Ap- pre- n- tice sea- men.	Others in deck force.	
Number in service June 30, 1909....	3,280	807	2,759	10,180	1,401	2,050	18,552	3,342
Admissions for all causes.....	1,144	1,444	1,369	7,311	1,170	2,614	11,824	1,563
General admission rate per 1,000....	348.78	1,789.34	496.30	718.17	835.12	1,275.12	637.29	467.96
Invalided from service.....	31	14	39	273	4	317	306	99
Invaliding rate per 1,000.....	9.45	17.35	14.14	26.82	2.86	154.63	16.49	29.41
Deaths.....	22	2	13	50	10	14	79	18
Death rate per 1,000.....	6.71	2.48	4.71	4.91	7.14	6.83	4.26	5.39
ADMISSIONS.								
Venereal diseases.....	64	17	362	2,565	121	356	4,143	709
Rate.....	19.51	21.07	131.21	251.96	86.37	173.66	223.32	212.15
Contagious diseases.....	255	278	203	1,179	88	986	2,361	208
Rate.....	77.74	344.49	73.58	115.82	62.81	480.98	127.26	62.24
Injuries.....	208	172	209	997	131	208	1,670	172
Rate.....	63.41	213.14	75.75	97.94	93.50	101.46	90.02	51.60
Skin diseases.....	89	126	96	571	41	126	919	63
Rate.....	27.13	156.13	34.79	56.09	29.26	61.46	49.54	18.85
General diseases of digestive organs.	203	203	82	302	40	65	438	79
Rate.....	61.89	251.55	29.72	29.67	28.55	31.71	23.61	23.93
Respiratory diseases (except pneu- monia and tuberculosis).....	113	60	47	282	23	210	339	41
Rate.....	34.45	74.35	17.04	27.70	16.42	102.44	18.27	12.27
Malaria.....	36	8	27	78	17	26	148	13
Rate.....	10.98	9.91	9.79	7.66	12.13	12.68	7.98	3.89
Rheumatic affections.....	53	19	52	214	18	59	280	49
Rate.....	16.16	23.54	18.85	21.02	12.85	28.78	15.09	14.67
Genito-urinary diseases (non-vene- real).....	31	31	33	130	10	109	276	30
Rate.....	9.45	38.41	11.96	12.77	7.14	53.17	14.88	8.98
Eye affections.....	36	256	28	87	7	55	142	23
Rate.....	10.98	317.22	10.16	8.55	4.99	26.83	7.65	6.91
Ear affections.....	24	15	11	110	8	51	119	10
Rate.....	7.62	18.59	3.99	10.81	5.71	24.88	6.41	2.99
Appendicitis and peritonitis.....	27	14	21	51	5	33	102	22
Rate.....	8.23	17.35	7.61	5.01	3.57	16.10	5.50	6.62
Alcoholism.....	14	1	37	97	5	1	45	3
Rate.....	4.27	1.24	13.41	9.53	3.57	.49	2.43	.90
Heart affections.....	12	14	10	65	3	62	50	10
Rate.....	3.66	17.35	3.62	6.39	2.14	30.24	2.70	2.99
Tuberculosis.....	7	5	17	41	5	23	91	18
Rate.....	2.13	6.20	6.16	4.03	3.57	11.22	4.91	5.39
Typhoid fever.....	14	2	5	39	2	7	74	5
Rate.....	4.27	2.48	1.81	3.83	1.43	3.41	3.99	1.60
Heat affections.....	6	2	9	86	2	6	24	3
Rate.....	1.83	2.48	3.26	8.45	1.43	2.93	1.29	.90
Mental diseases.....	8	.....	4	42	1	9	20	11
Rate.....	2.44	.....	1.45	4.13	.71	4.39	1.08	3.29
Neurasthenia.....	23	7	7	21	4	3	22	8
Rate.....	7.01	8.67	2.54	2.06	2.86	1.46	1.19	2.39
Dysenteric affections.....	8	1	5	13	1	.....	22	1
Rate.....	2.44	1.24	1.81	1.28	.71	.....	1.19	.30
Suicide.....	.....	.....	.....	2	2	.....	5	1
Rate.....	.....	.....	.....	.19	1.43	.....	.27	.30
SICK DAYS.								
From above admissions.....	18,535	8,845	21,080	98,295	8,018	37,776	114,344	24,776
From other affections.....	2,183	727	2,184	7,269	739	1,453	13,186	2,098
Of active force not accounted for by regular medical returns, in other than naval hospitals.....	344	77	160	329	82	.....	1,284	118
Sick leave of officers from practi- cally inactive force.....	2,963	592	.....	.....	.....	.....	.....	.....
Hospitals for insane.....	1,095	.....	1,623	11,370	372	2,907	3,099	2,326
Naval sanatorium for tubercu- lous.....	2,961	2,162	3,137	5,172	578	4,298	11,587	4,155
Total.....	28,111	12,403	28,184	122,435	9,789	46,434	143,500	33,473
A v. sick days for each individual.....	8.57	15.37	10.22	12.03	6.99	22.65	7.73	10.02
* Total damage in terms of In- dividuals whose loss of ser- vice by sickness, discharge, or death would be represented as continuous throughout the year.....	103.52	41.98	103.22	496.94	33.82	289.98	585.65	150.21

nel for 1909 by admissions, admission rates, sick days, and computed damage.

Electri- cians.	Other artifi- cers.	Hospi- tal Corps.	Cler- ical force.	Musi- cians.	Ma- rines (en- listed.)	Pris- oners (in prison).	Total.	Sick days.	Inva- lided from service.	Deaths.	Total damage.*
1,579	1,330	1,044	1,080	812	9,200	1,038	458,454				
659	714	533	439	350	7,467	134	38,735				
417.35	536.84	510.54	406.48	431.03	811.63	129.09	497.30				
22	21	42	7	14	429	3	1,621				
13.93	15.80	40.23	6.48	17.24	46.63	2.89	28.35				
5	10	4	4	4	48	3	286				
3.17	7.52	3.83	3.70	4.93	5.22	2.89	5.002				
188	213	90	141	83	1,986	26	11,064	139,396	285	5	526.91
119.06	160.15	86.21	130.56	102.23	215.87	25.05	199.17	68,802	8	27	206.16
135	111	107	62	63	978	17	7,031				
85.30	83.46	102.49	57.41	77.59	106.30	16.38	126.57	73,700	221	100	362.42
91	94	47	42	39	818	17	4,915				
57.63	70.68	45.02	38.89	48.03	88.91	16.38	88.48	29,426	19	3	91.62
34	45	17	23	19	407	8	2,584				
21.53	33.83	16.28	21.30	23.40	44.24	7.71	46.52	18,585	22	7	65.42
21	44	33	29	24	381	12	1,956				
13.30	33.08	31.61	27.77	29.56	41.41	11.56	35.21				
27	23	20	17	25	180	2	1,409	19,118	42	5	75.88
17.10	17.29	19.16	15.74	30.79	19.57	1.93	25.36				
7	14	14	9	8	640	1	1,046	12,926	3		36.91
4.43	10.53	13.41	8.33	9.85	69.57	.96	18.85				
11	17	15	9	15	207	14	1,032	23,792	52		91.18
6.97	12.78	14.37	8.33	18.47	22.50	13.77	18.58				
21	23	17	16	8	166	2	903	20,211	71	13	99.87
13.30	17.29	16.28	14.81	9.85	18.04	1.93	16.26				
27	8	13	8	4	128	4	831	13,137	100		85.99
17.10	6.01	12.45	7.41	11.08	13.91	3.85	14.78				
6	9	13	5	5	116	1	503	8,812	113		80.64
3.80	6.77	12.45	4.63	6.16	12.61	.96	9.05				
4	11	28	6	5	48	4	381	13,291	11	8	45.91
2.53	8.27	26.82	5.56	61.6	5.22	3.85	6.86				
6	17	2	13	3	106		350	1,786	5	9	11.89
3.80	12.78	1.91	12.04	3.09	11.52		6.30				
4	5	7	7	1	95		345	7,394	3	12	27.76
2.53	3.76	6.70	6.48	1.22	10.33		6.21				
11	4	18	1	5	58	7	311	{ 10,568 d 48,416 }	{ 27 128 }	40	239.10
6.07	3.01	17.24	.93	6.16	6.30	6.74	5.60	10,378		17	36.93
4	3	7	4	4	19		189				
2.53	2.26	6.70	3.70	4.93	2.07		3.40				
			3		14		155				
			2.78		1.53		2.79	703	3		3.42
2	6	1	1	4	29	7	145				
1.27	4.51	.96	.93	4.93	3.15	6.74	2.61	{ 3,602 e 31,482 }	31	1	112.40
3	4	5	2	4	30	1	144				
1.90	3.01	4.79	1.85	4.93	3.26	.96	2.59	4,679	36		30.82
1	1	3	1		70		127	4,052	5	1	14.10
.63	.75	2.87	.93		7.61		2.29				
			2		5		17	(f)		(f)	
			1.85		.53		c.297				
9,037	10,670	9,966	5,543	5,340	114,273	1,942	488,440				
1,392	697	481	739	757	7,121	420	41,446				
19	25	22	42		192		2,694				
534	1,029	1,176	470	644	4,751	86	3,585				
2,699	147	4,652	829	116	5,712	211	48,416				
13,681	12,598	16,297	7,623	6,857	132,049	2,659	616,063				
8.66	9.45	15.61	7.06	8.44	14.35	2.56	10.54				
50.98	49.93	67.65	26.38	27.79	600.28	10.29	2,641.34				

* This total is 1,282 in excess of average strength as furnished by the department by reason of 1,038 "prisoners" already included under other classes and by reason of the number in service June 30, 1909, being 244 in excess of the actual average strength.
 b Computed upon average strength shown by returns of medical officers.
 c Computed upon average strength given by department.
 d Figures furnished by reports from Las Animas, Colo.
 e Figures furnished by reports from hospitals for insane.
 f Figures included under "Injuries."

20. Table showing ships which had infectious and contagious disease on board during 1909 and the character and number of such.

Ship.	Scabies.	Catarrhus epidemics.	Diphtheria.	Febris cerebro-spinalis.	Febristypoides.	Febris pneumoniae.	Morbilli and Rubella.	Parotiditis epidemics.	Scarlatina.	Tonsillitis
Alabama.....		1								
Albany.....	4	23			1	1	1	10		25
Albatross.....						1				2
Alliance.....										9
Arayat.....									1	
Arethusa.....								3		3
Birmingham.....	5							2		12
Buffalo.....	1	4				1	37	8		34
California.....	8		1		1	7	3	5		26
Castine.....		10			4		1			11
Celtic.....	3	16			4					17
Charleston.....	3	1				3		2	2	50
Chattanooga.....		1								13
Chester.....	1	10			1	2	2	1		50
Cheyenne.....		1					3			2
Chicago.....		12								7
Cleveland.....	1	2				1		5		68
Colorado.....	1	4								7
Concord.....		2								
Connecticut.....	4	30			8	2	1	2		114
Culgoa.....		2			1					14
Denver.....	1	8								3
Des Moines.....	12	28	1		1			1		42
Dixie.....	3	9			4	2	2	3		14
Dolphin.....		4			1	1				11
Dubuque.....		1								16
Eagle.....	1	1								2
Fish Hawk.....					1					3
Galveston.....		31								14
Georgia.....		7			8	2	2			29
Glacier.....	2						2			5
Hartford.....						1				8
Helena.....	1					2				4
Hist.....										8
Idaho.....	3				3		1			44
Illinois.....						2		2		4
Indiana.....						2				24
Iris.....					1					1
Kansas.....		21				7	1	4		125
Kearsarge.....					3					6
Kentucky.....		2			2			1		5
Louisiana.....		1			9				1	51
Maine.....	4				3		1	8		51
Marietta.....	1							1		11
Maryland.....		18				4		1		35
Mayflower.....	2	5					4			7
Milwaukee.....										4
Mindoro.....								1		
Minnesota.....		10				2	5	28		25
Mississippi.....					5	9				68
Missouri.....		1			3	1	16	3	10	41
Monadnock.....										1
Montana.....	4	29		1	1	2	2	17		33
Monterey.....										14
Montgomery.....		1			1			1		9
Nebraska.....	2	45				2	3	5		149
New Hampshire.....	1	6			2	2		3		49
New Jersey.....	5	43			4		14	21		124
New Orleans.....										1
New York.....	1	13			2	2	11			26
North Carolina.....					4	1				70
Ohio.....	15	4				2	9	9		62
Olympia.....		3						1		5
Paducah.....	1					1				19
Panther.....	1	9			4	1	1	3		41
Pennsylvania.....	1	9			3	4	18			26
Prairie.....	1						10	1	1	11
Puritan.....		1								
Rainbow.....		1				1		4		13
Rhode Island.....	7	25			1	11	10	1		150
Salem.....	8	1				1	13			31
Scorpion.....		2								2
South Dakota.....	2				1	4				48
St. Louis.....	13					2				23
Supply.....	3	15			1					7

20. Table showing ships which had infectious and contagious disease on board during 1909 and the character and number of such—Continued.

Ship.	Scabies.	Catarrhus epidemica.	Diphtheria.	Febris cere- bro-spinalis.	Febris ty- phoides.	Febris pneu- monica.	Morbili and Rubella.	Parotiditis epidemica.	Scarlatina.	Tonsillitis.
Solace.....	1	3	1				6	1		2
Tacoma.....	5	85	1			5	11	3		32
Tennessee.....		3					1	1		83
Tonopah.....	3	1					1			5
Torpedo flotilla (Atlantic).....	1				1					3
Torpedo flotilla (Asiatic).....	6						4	16		4
Torpedo flotilla (Pacific).....	1									14
Torpedo flotilla (Reserve).....		17			1		10	7		172
Vermont.....		3								2
Vicksburg.....		26			7	5	6	34		1
Villalobos.....	1	1			3	2	1			58
Virginia.....	3	15			1	5		3		27
Washington.....	1	19			7	1		8		101
West Virginia.....		6			6	1			1	12
Wilmington.....	6	4				1				156
Wisconsin.....										11
Wolverine.....										1
Yankee.....										20
Yorktown.....										1

XXI

DISCHARGES FROM THE NAVY AND MARINE CORPS
 FOR PHYSICAL DISABILITY DURING 1909.
 AVERAGE STRENGTH 57172
 RATIO PER 1000 OF STRENGTH 27.56

CAUSE OF DISABILITY	RELATION BY SCALE	NO.
SYPHILIS		166
VALVULAR HEART DISEASE		124
FLAT FEET		104
DEFORMITY		95
MIDDLE EAR DISEASE		68
EPILEPSY		63
GONORRHEAL RHEUMATISM		63
RUPTURE		63
PALPITATION OF HEART		48
DEAFNESS		39
NEURASTHENIA		36
GONORRHEA		33
TUBERCULOSIS		27
FRACTURES		24
ENURESIS		21
NEAR SIGHTED		20
VARICOCELE		19
VARICOSE VEINS		19
CHRONIC BRONCHITIS		18
DEMENTED		16
JOINT INFLAMMATION		14
ASTHMA		14
RHEUMATISM		14
RHEUMATIC FEVER		13
NEPHRITIS		13
ASTIGMATISM		12
APPENDICITIS		11
MELANCHOLIA		11
SEASICKNESS		10
HAEMORRHOIDS		9

22. Surgical operations for the year ending December 31, 1909.

	Cases.	Cured.	Im- proved.	Unim- proved.	Died.
HEAD.					
Cranium:					
Craniotomy—					
Depressed fragments elevated.....	2		2		
Trephining for fracture.....	2				2
For hemorrhage.....	1				1
Necrotic bone removed.....	3	1	2		
Mastoid exenteration.....	8	7	1		
Eye:					
Enucleation.....	1				
Cataract, operation for.....	2		2		
Pterygium, operation for.....	25	25			
Face:					
Carcinoma, excision.....	2	1		1	
Deflected septum—					
Asche's operation.....	3	3			
Submucous resection.....	10	9	1		
Hematoma of lip, excised.....	1	1			
Hair lip, plastic operation for.....	1	1			
Paracentesis of tympanum.....	1	1			
Tonsillectomy.....	84	84			
Turbineotomy.....	8	8			
Neck:					
Cellulitis, incision.....	1				a 1
Cervical adenectomy.....	18	15	2	1	
Deep abscess, opened and drained.....	4	3	1		
Thyroidectomy.....	2	2			
Neck and larynx, extensive wound sutured.....	1				1
TRUNK.					
Chest:					
Breast, fibroma, excision.....	1	1			
Empyema, Estlander's operation for.....	8	5		1	2
Fibroma, breast, excision.....	1	1			
Lung, abscess of, incision and drainage.....	1	1			
Mammary gland, removed.....	4	4			
Thoracentesis.....	19	19			
Thoracotomy.....	4	1	1	1	1
Abdomen:					
Abscess—					
Abdominal, opened and drained.....	4	3			1
Subphrenic, opened and drained.....	1	1			
Appendectomy.....	225	219			b 6
Appendicostomy.....	3	3			
Cancer of pancreas.....	1			1	
Cholecystostomy.....	7	3	3		c 1
Colostomy.....	1				1
Cystorrhaphy.....	1	1			
Cystotomy, supra pubic.....	5	4			1
Gastro-enterostomy.....	3	3			
Herniotomy—					
Inguinal.....	240	239		1	
Ventral.....	9	8		1	
Intestinal fistula closed.....	1	1			
Kidney, decortication of.....	2	1	1		
Laparotomy—					
Echinococcus cyst.....	1				1
Exploratory.....	9	3		4	2
For intestinal obstruction.....	3	1			2
For typhoid perforation.....	2				2
Liver—					
Abscess of.....	6	3	2		1
Morrison's operation for cirrhosis of.....	1				1
Sarcoma, operation for.....	1				1
Nephrectomy.....	3	3			
Nephrotomy.....	3		2	1	
Peritonitis, deep drainage.....	3	2			1
Back:					
Abscess, lumbar, opened and drained.....	1		1		
Exploratory incision for hematuria.....	1			1	
Fibroma, lumbar, incision and curettage.....	1	1			
Laminectomy.....	4		3		1
Tubercular abscess over scapula, opened and drained.....	1		1		
Rectum:					
Abscess—					
Ischio-rectal, opened and drained.....	11	11			
Perianal, opened and drained.....	1	1			
Condylomata, anal, excision.....	3	3			

a Heart failure following ether anaesthesia.

b One case complicated with subphrenic abscess, 3 general peritonitis, 1 tubercular nephritis.

c Extensive hepatic suppuraton.

22. Surgical operations for the year ending December 31, 1909—Continued.

	Cases.	Cured.	Im- proved.	Unim- proved.	Died.
TRUNK—continued.					
Rectum—Continued.					
Fissure, anal.....	3	3			
Fistula, anal, operation for.....	36	35		1	
Hemorrhoids, operation for.....	182	182			
Prolapsed anus, operation for.....	1	1			
Rectal ulcer, cauterization.....	1		1		
Genitals:					
Circumcision.....	394	394			
Cyst of oord removed.....	1	1			
Epididymectomy.....	1	1			
Epididymitis, incision for and drainage.....	7	7			
Hydrocele, operation for.....	39	39			
Hypospadias, operation for.....	2	2			
Orchidectomy.....	7				
Ruptured urethra sutured.....	1	1			
Scrotum, ablation of.....	1				
Urethral fistula, excision and closure.....	3	1	1	1	
Urethrotomy—					
External.....	7	7			
Internal.....	6	5			1
Varicocele, operation for.....	225	225			
Vasectomy.....	1				
EXTREMITIES.					
Amputations:					
Arm.....	2				
Forearm.....	1				
Foot.....	1				
Fingers.....	32				
Leg.....	4				1
Thigh.....	1				
Toe.....	11				
Fractures:					
Femur, refractured and reset.....	1	1			
Humerus, ununited fragments united.....	2			2	
Metacarpal, refractured and wired.....	1	1			
Metacarpal, fragments approximated.....	1	1			
Patella sutured.....	3	3			
Radius, fracture wired.....	1	1			
Tibia and fibula, ununited fragments wired.....	3	2		1	
Ulna and radius, compound, approximation.....	1		1		
Joints:					
Arthrotomy—					
Elbow.....	1	1			
Knee.....	2	2			
Clavicle, dislocation, wired.....	1	1			
Elbow—					
Ankylosis, adhesions broken.....	2		1	1	
Resection of head of radius for ankylosis.....	1		1		
Knee—					
Abscess of, incision and drainage.....	1		1		
Ankylosis, adhesions broken.....	1	1			
Aspiration.....	2	2			
Cyst removed.....	1	1			
Detached ligament sutured.....	1	1			
Excision of cartilage.....	1		1		
Exploratory.....	1	1			
Fibroma excised.....	1	1			
Foreign body removed.....	1	1			
Gunshot wound of, cleaned and drained.....	1	1			
Bones:					
Fibula, head of, excised.....	1	1			
Hallux valgus, operation for.....	8	8			
Necrotic bone, excision.....	3	3			
Necrosis, curettment.....	4	4			
Osteoma, excision.....	1	1			
Osteomyelitis, incision and drainage.....	3	3			
Osteotomy for deformity.....	1	1			
Periostitis, curettment.....	17	17			
Sequestrectomy.....	3	2	1		
Scaphoid, resection of, for deformity.....	1	1			
MISCELLANEOUS.					
Abscess:					
Foot, incision and drainage.....	1	1			
Pelvic, incision and drainage.....	1	1			
Perineal, incision and drainage.....	1	1			

* Death result of sepsis, extensive perineal gangrene existing prior to operation.

22. Surgical operations for the year ending December 31, 1909—Continued.

	Cases.	Cured.	Im- proved.	Unim- proved.	Died.
MISCELLANEOUS—continued.					
Abscess—Continued.					
Pari-nephritic, incision and drainage	1	1			
Thigh, incision and drainage	3	3			
Miscellaneous, incision and drainage	1,442	1,442			
Adenectomy:					
Axillary	1	1			
Inguinal	338	337		1	
Carbuncle, extensive, incision and drainage	21	21			
Cellulitis:					
Foot, extensive, incision and drainage	1	1			
Leg, extensive, incision and drainage	1	1			
Unclassified, incision and drainage	59	59			
Wrist, incision and drainage	1	1			
Cyst, removed	29	29			
Foreign body removed	9	9			
Furunculus, incision and drainage	1,710	1,710			
Gunshot wound, hand, plastic	1	1			
Hematoma, leg, removed	2	2			
Hammer toe, operation for	4	4			
Infected foot, opened and drained	1	1			
Ingrowing nail, operation for	64	64			
Ligation:					
Dorsalis pedis artery	1	1			
Left facial and left external carotid for persistent nasal hemorrhage	1	1			
Radial artery for aneurism	1	1			
Right facial artery for persistent nasal hemorrhage	1	1			
For post-operative hemorrhage	1	1			
Lipoma, multiple, excised	2	2			
Neuritis, ulnar nerve, operation for	1	1			
Plastic operation:					
For contracture	1	1			
For crushed heel	1	1			
For ulcer	1	1			
Paronychia, incision and drainage	1	1			
Ruptured muscle sutured	1	1		1	
Skin grafting	7	7			
Teno-synovitis, incision for	1	1			
Tenorrhaphy	10	10			
Tumors, unclassified, excised	4	4			
Ulcer, leg, extensive, curettment and excision	1	1			
Varicose veins, legs, ligation and excision	35	35			
ANÆSTHESIA.					
Ether	800				
Ether, rectal	2				
Chloroform	84				
Chloroform and ether	38				
Ethylchloride general	1				
Gas-ether	98				
Ethylchloride and ether	22				
Ethylchloride and chloroform	2				

• Epidemic of 1,638 cases on the Pennsylvania.

A.

Table showing, as nearly as possible, the average strength of the Navy and Marine Corps, including officers and enlisted men, total number of deaths with death rate per thousand for each year from 1850 to 1909 inclusive.

Year.	Average strength.	Deaths.	Death rate per thousand.	Year.	Average strength.	Deaths.	Death rate per thousand.
1850.....	9,087	129	14.19	1850.....	10,235	111	10.84
1851.....	9,063	85	9.37	1851.....	11,118	97	8.72
1852.....	9,103	81	8.89	1852.....	10,631	90	8.46
1853.....	9,051	84	9.28	1853.....	9,874	112	11.34
1854.....	8,975	193	21.50	1854.....	10,948	110	10.04
1855.....	8,972	115	12.81	1855.....	9,191	109	11.85
1856.....	9,902	119	11.94	1856.....	9,188	109	11.86
1857.....	10,163	123	12.10	1857.....	9,618	99	10.29
1858.....	11,895	155	13.03	1858.....	9,955	123	12.35
1859.....	11,895	115	9.66	1859.....	11,219	203	18.09
1860.....	11,000	121	11.00	1860.....	11,768	106	9.00
1861.....	20,000	173	8.60	1861.....	11,501	91	7.91
1862.....	25,905	575	22.19	1862.....	11,196	100	8.93
1863.....	40,000	1,048	26.20	1863.....	12,109	89	7.34
1864.....	43,787	1,373	31.35	1864.....	12,520	122	9.74
1865.....	32,641	930	28.49	1865.....	13,191	90	6.82
1866.....	17,193	310	18.03	1866.....	14,196	78	5.49
1867.....	13,482	360	26.70	1867.....	15,734	88	5.59
1868.....	15,492	189	12.19	1868.....	23,986	173	7.21
1869.....	13,463	148	10.99	1869.....	20,819	153	7.35
1870.....	11,809	235	19.90	1900.....	23,756	211	8.88
1871.....	11,819	135	11.42	1901.....	26,873	166	6.18
1872.....	12,705	147	11.57	1902.....	31,240	211	6.75
1873.....	14,460	128	8.85	1903.....	37,248	224	6.01
1874.....	15,260	160	10.48	1904.....	40,555	246	6.06
1875.....	11,675	125	10.70	1905.....	41,313	268	6.48
1876.....	12,307	116	9.42	1906.....	42,529	241	5.66
1877.....	8,609	191	22.18	1907.....	46,336	203	5.67
1878.....	9,007	106	11.76	1908.....	52,913	305	5.76
1879.....	10,388	96	9.24	1909.....	57,172	286	5.00

* Includes 116 deaths from drowning when U. S. S. Oneida was sunk by the P. & O. steamer Bombay in Tokio Bay, January 24, 1870.

† Includes 98 deaths from drowning, that occurred on the U. S. S. Huron, when wrecked, November 24, 1877.

‡ Includes 50 deaths from drowning, when the Trenton and Vandalla were wrecked by hurricane at Samoa March 16, 1889.

NOTE.—The above data from 1850 to 1866, inclusive, was taken from "Hygienic and Medical Reports," published by this bureau in 1879.

B.

Table showing total number of officers in the United States Navy and Marine Corps on the active list (including midshipmen), total number of deaths, and death rate annually for thirty-one years, 1879 to 1909, both inclusive.

Year.	Total number of officers on the active list, including midshipmen.	Total number of deaths from all causes—disease, injury, drowning.	Death rate per 1,000 annually.	Year.	Total number of officers on the active list, including midshipmen.	Total number of deaths from all causes—disease, injury, drowning.	Death rate per 1,000 annually.
1879.....	2,036	18	8.84	1895.....	1,699	11	6.47
1880.....	2,078	21	10.19	1896.....	1,654	14	8.46
1881.....	2,031	29	14.22	1897.....	1,751	9	5.13
1882.....	2,055	20	9.07	1898.....	2,043	25	12.23
1883.....	1,885	25	13.26	1899.....	1,974	19	9.62
1884.....	1,847	14	7.57	1900.....	2,052	17	8.28
1885.....	1,802	23	12.76	1901.....	2,162	16	7.80
1886.....	1,836	26	14.10	1902.....	2,336	17	7.27
1887.....	1,753	8	4.56	1903.....	2,729	16	5.86
1888.....	1,759	18	10.23	1904.....	3,017	23	7.62
1889.....	1,740	25	14.36	1905.....	3,151	16	5.07
1890.....	1,735	19	10.95	1906.....	3,198	22	6.88
1891.....	1,706	15	8.79	1907.....	3,306	31	9.20
1892.....	1,665	9	5.40	1908.....	3,483	17	4.80
1893.....	1,709	12	7.02	1909.....	4,087	24	5.87
1894.....	1,712	12	7.02				

‡ Spanish-American war.

§ Seven midshipmen drowned.

Average death rate for thirty-one years, 8.51.

C.

Deaths in the naval service during the "civil war." a

NUMBER AND PER CENT OF KILLED AS A RESULT OF INJURIES RECEIVED IN ACTION.

	Number.	Per cent.
Classified:		
Wounds.....	1,154	0.977
Drowned.....	308	.261
Scalds.....	342	.289
Total.....	1,804	1.528
Unclassified.....	373	.316
Total deaths from injuries.....	2,177	1.844

NUMBER AND PER CENT OF DEATHS FROM OTHER CAUSES.

In prison.....	95	0.080
Not incident to battle.....	2,316	1.962
Total deaths from other causes.....	2,411	2.042
Total deaths from injuries in battle.....	2,177	1.844
Total deaths from other causes.....	2,411	2.042
Total deaths from all causes.....	4,588	3.886

^a The Report of the Secretary of the Navy for the year 1865, p. 33 shows the total enlistment of seamen from March 4, 1861, to May 1, 1865, to have been 118,044.

CONCLUSION.

In closing this report it has seemed proper to itemize the more important specific recommendations in the order found therein, and in measuring their importance the attention of the department is respectfully invited to the extended arguments to be found in other annual reports of recent years.

It is recommended to:

1. Provide an additional statistical clerk for the bureau.
2. Require ability to swim well a prerequisite for newly appointed officers and men to remain in the Navy and Marine Corps.
3. Ask of Congress the repeal of the provision of act approved March 3, 1909, which diverts certain moneys from the naval hospital fund.
4. Urge the establishment of a naval medical reserve corps.
5. Urge the establishment of grade of chief pharmacist, increase the warrant grade, and provide intermediate ratings for Hospital Corps as provided in bills already approved by the department.
6. Urge the enactment of legislation to provide dentists as commissioned officers of the lower grades in the navy.
7. Assign medical officers of extensive practical experience to duty under the "Aid for inspections," one for hospitals and shore stations, and one for the service afloat.
8. Enforce venereal prophylaxis as practiced in Asiatic and Atlantic Fleets throughout the entire service ashore and afloat.
9. Substitute for the present annual physical test more recreative and continuous athletic exercise, and for the younger personnel adopt the Swedish system of physical training.

10. Develop at repair yards and training stations segregation barracks on unit system to gradually replace receiving ships and to accommodate the crews of vessels undergoing extensive repairs.

11. Provide adequate sanitary facilities for the personnel of ships in dry docks.

12. Substitute a readily washable texture and color for all service uniforms of officers and men.

13. Extend vaccination against typhoid fever to the entire personnel under the age of 50 years.

14. Require statement from recruits as to prior attack of appendicitis and incontinence of urine and as to family history of nervous or mental disease.

15. Transfer the training station at San Francisco to a climate more healthful for recruits south of Point Concepcion.

16. Adopt the bubbling-spring device for drinking fountains throughout the entire service ashore as well as afloat.

17. Provide more suitable air intakes for ventilation for forward compartments of large ships for moderate or rough weather.

18. Assign by regulation definite percentage of stretcher bearers as required for each type of fighting ship.

19. Designate division officers by regulation to give first-aid instruction to the crew; the division officers to be instructed by the medical officers.

20. Seek amendment by Congress of sections 1373 and 1374 for more specific authority and duties of fleet surgeons.

21. Urge upon Congress appropriations for the building of two suitable hospital ships

C. F. STOKES,
Surgeon-General, U. S. Navy.

The SECRETARY OF THE NAVY.

REPORT OF THE COMMANDANT OF UNITED STATES MARINE CORPS.

SEPTEMBER 28, 1910.

SIR: In compliance with the department's instructions of July 28, 1910, I have the honor to submit this, my last annual report before being placed upon the retired list, November 30, 1910, in conformity with law, of the condition and service of the United States Marine Corps for the last fiscal year, and, in connection therewith, to transmit the annual estimates for its support during the coming fiscal year.

During the period covered by this report inspections of the marine barracks at the navy-yards and stations, both in the United States and in the insular possessions thereof, have been made, as far as practicable, either by the undersigned or by officers of the adjutant and inspector's department. Such of the barracks as have not been inspected during the past year will be inspected in the near future. Favorable reports as to the personnel, so far as pertains to health and discipline, have generally been made of those posts which have been visited by the inspecting officers. Adverse criticism of some of the barracks has been made, due to their being obsolete both as to construction and capacity, but there is no way of obviating this unless Congress appropriates for new and necessary barracks.

PERSONNEL.

At all of the stations of the corps in the United States the enlisted men are called upon to perform arduous duty. Both officers and men are so continuously on guard duty as to prevent instruction in educational training to a degree detrimental to the high standard wished for in the enlisted man. The undersigned finds himself compelled to permit the placing of enlisted men on duty prior to the time when they have attained such a state of efficiency as would properly warrant such assignment. New posts have been established at New London, Conn.; Winthrop, Md.; the naval prison, Boston, Mass.; the United States Naval Medical School Hospital, Washington, D. C.; the United States Naval Hospital, New York, N. Y.; and the United States Naval Hospital, Las Animas, Colo., and those already established require greater complements, owing to the increased area and work of the yards, and as a result the personnel of the corps is being strained to its utmost, and some action looking toward relief must be taken in the very near future.

MATÉRIEL.

During the past year the money appropriated by the Congress for the maintenance of the Marine Corps has been judiciously expended. The appropriation, "Repair of barracks," has been utilized in making

such minor repairs and alterations as were necessary to keep the barracks in proper condition for habitation. A great drain has been made on this appropriation because of the condition and requirements of many of the older barracks, especially that at Mare Island, Cal.

The report of the officer in charge of the quartermaster's department of the corps shows that minor repairs and improvements have been made during the past year at all the stations.

PUBLIC WORKS.

The act entitled "An act making appropriations for the naval service for the fiscal year ending June 30, 1911, and for other purposes," provided for the following:

For the extension of marine officers' quarters and the improvement of ground, navy-yard, Philadelphia, Pennsylvania, seventy thousand dollars.

For the extension of marine officers' quarters, navy-yard, Norfolk, Virginia, forty-seven thousand five hundred dollars.

The necessary steps are being taken by the officer in charge of the quartermaster's department of the corps to construct the above authorized public works.

PUBLIC WORKS CONTEMPLATED.

The department has approved the following estimates for public works for the Marine Corps for the fiscal year ending June 30, 1912:

For fireproof barracks, improving grounds, sewerage, etc., at the navy-yard, Boston, Mass.....	\$100,000
For officers' quarters at navy-yard, Boston, Mass.....	48,000
Toward the completion of the marine garrison, navy-yard, Philadelphia, Pa.....	250,000
For officers' quarters, including pillg, navy-yard, Philadelphia, Pa....	40,000
For the extension of existing quarters, buildings, mess hall, etc., increasing rifle-range facilities, and the improvement of target butts, Marine Corps rifle range, Winthrop, Md.....	20,000
	458,000

HEADQUARTERS UNITED STATES MARINE CORPS.

The undersigned deems it his duty to again invite the attention of the department to the inadequacy of the space allotted to these headquarters in the Mills Building. Not only does the crowded condition of the rooms interfere with the efficient performance of duty by the clerical force, but it is believed constitutes a menace to the health of the clerks employed, due to improper ventilation and lighting facilities.

DEPOT OF SUPPLIES, PHILADELPHIA, PA.

Extension B to the depot of supplies of the Marine Corps was completed in October, 1909. As the appropriations will admit, modern machinery is gradually being installed at the depot to manufacture articles of uniform clothing for enlisted men, which, to a certain extent, has heretofore been manufactured elsewhere; also to manufacture canteens, clothing bags, haversacks, and other articles of accouterment. This will cause a considerable saving to the Government. In addition to this, all the packing boxes, formerly procured

in the open market, are now being manufactured at the depot, which resulted during the past year in a saving of about \$5,000.

Additional ground should be purchased and an addition to this depot should be built, in order to manufacture all equipage and clothing, except shoes, for 10,000 men. Such an addition would result in an actual saving to the Government.

DEPOT OF SUPPLIES, SAN FRANCISCO, CAL.

Early in the fiscal year the depot of supplies in San Francisco, Cal., was moved to a large, modern, fireproof building on the corner of Second and Howard streets. This building accommodates all the staff offices of the corps on the west coast, and all supplies are issued from this depot to the stations on the Pacific coast and the island possessions, excepting the Philippines. Marine detachments of vessels in adjacent waters are also outfitted from this depot.

PHILADELPHIA, PA.

Under date of February 17, 1910, a contract was awarded for the construction of an extension to the present marine barracks building at the navy-yard, Philadelphia, Pa., for the sum of \$118,440, and this work will shortly be commenced. The act of Congress approved June 24, 1910, appropriated \$70,000 for the purpose of erecting an extension to the marine officers' quarters and the improvement of grounds at this post, and bids for this work will shortly be opened. In the estimates for the fiscal year ending June 30, 1912, approved by the department, an item of \$250,000 has been inserted for the purpose of completing the marine garrison at the navy-yard, Philadelphia, and this amount, together with the amounts already appropriated, will, when the work is finally completed, make the post at Philadelphia thoroughly modern in all respects. Philadelphia is rapidly becoming the most important post of the Marine Corps. It is at this station that nearly all expeditionary forces are mobilized and equipped and from there transferred to their destination, especially so in view of the fact that the depot of supplies of the Marine Corps is located in that city.

It is hoped that in the near future Philadelphia can be made a depot for the instruction of all recruits enlisted in the East, as well as the location of the Marine Officers' School and the Advanced Base School, which are now located at Port Royal, S. C., and New London, Conn., respectively. Philadelphia is considered an ideal place for the purposes above mentioned, inasmuch as it is practically the most central point from which men can be distributed to the various stations of the corps on the Atlantic coast and to vessels of the United States Atlantic Fleet. When the building operations now under way and contemplated are completed Philadelphia will be able to accommodate practically a full regiment of marines.

MARINE CORPS RIFLE RANGE, WINTHROP, MD.

The rifle range permanently established by the Marine Corps at Winthrop, Md., is a model one in every respect and has every facility of an up-to-date range. This range is easily accessible for the posts at Norfolk, Va., Annapolis, Md., Philadelphia, Pa., and the

two posts of the corps in Washington. In the estimates for the fiscal year ending June 30, 1912, which have been approved by the department, an item of \$20,000 has been inserted for the purpose of extending the present quarters, increasing the rifle-range facilities, and the improvement of the target butts at this place. Necessary buildings of a temporary nature have been erected for the housing of the permanent detachment stationed at Winthrop, which at present consists of 4 officers and 86 enlisted men.

During the present year range practice, beginning about May 15, was held for the officers and enlisted men from the marine barracks, Philadelphia, Pa., Annapolis, Md., the two posts in Washington, Norfolk, Va., and Charleston, S. C. This range is far from complete; but if \$20,000 is allotted for necessary improvements, it will be in excellent working order. At present detachments arriving from other posts are placed under canvas (a very expensive means of housing).

PORTSMOUTH, N. H.

The present barracks at the navy-yard, Portsmouth, N. H., are entirely inadequate for the demands of the yard, and it is a matter of urgent necessity that steps be taken in the near future to provide for proper barracks accommodations not only for the marine garrison at the yard, but also for the detachment stationed at the naval prison at that place, and in view of the fact that the department, under date of September 24, 1909, set aside a piece of land on Seavey's Island as a reservation for marine barracks and drill grounds, it is respectfully requested that the Major-General Commandant be authorized, when appearing before the House Committee on Naval Affairs during the coming session of Congress, to bring to the attention of that body the necessity for an immediate appropriation for the construction of barracks and officers' quarters, improvement of grounds, etc., at Portsmouth, it being estimated that \$250,000 will be necessary for this purpose.

MARE ISLAND, CAL.

The undersigned deems it his duty to again invite the department's special attention to the condition of affairs at the navy-yard, Mare Island, Cal. The barracks building at that station was erected in 1864, is of obsolete design and construction, and is entirely too small to accommodate the large number of men the demands of the service require to be kept at this station, consequently about 60 per cent of the enlisted men live in tents. The building was seriously damaged by the earthquake in 1906, and was condemned by a board of survey. A new barracks building and additional officers' quarters should be provided for this station immediately. Under existing conditions it requires a considerable outlay of money to keep the building, which is entirely inadequate, in as comfortable and habitable a condition as possible, even though at the best the men are crowded together in small, badly arranged rooms, without regard to modern ideas of sanitation and health.

The four sets of junior officers' quarters at this post were built many years ago, are of frame construction, and fail to meet the present requirements of the service, besides being insufficient for the

accommodation of the officers who are now and should be attached to this station, many of whom are obliged to draw commutation of quarters. It is earnestly urged that authority be given for modern quarters at this post at the same time that consideration is given to the question of new barracks.

NEW RIFLES.

The attention of the department is again invited to the fact that the rifles now in use by the Marine Corps are obsolete and deteriorating, and require replacement. In the act entitled "An act making appropriations for the naval service for the fiscal year ending June 30, 1911, and for other purposes," approved June 24, 1910, the sum of \$50,000 was appropriated for the purchase of new rifles, and with this sum, augmented by an allotment from the current appropriation "Military stores," 4,000 new rifles, complete, were purchased from the army, the total cost of same being \$79,811.50. Twelve hundred (1,200) of these new rifles were sent to the Philippine Islands via the U. S. S. *Buffalo*, for the purpose of equipping the enlisted men of the First Brigade, U. S. Marines, there, leaving 2,800 for distribution to the force stationed on shore in the United States, i. e., 4,422 men, which will only be sufficient to equip about 60 per cent of the latter force.

Under date of August 17, 1910, this office was informed by the department that the necessary steps had been taken to equip all battle ships and armored cruisers in commission with the new model Springfield rifle, equipments, and ammunition, immediately after the ensuing battle practice, upon arrival of the ships concerned at their home yards. This will require about 1,200 of the rifles now on hand.

In order to properly equip the Marine Corps with the new Springfield rifle it is necessary that 6,000 rifles, complete, with the necessary ammunition, be purchased, and for this purpose the undersigned respectfully recommends that an appropriation of \$185,000 be made with which to purchase the above-mentioned number of rifles and 2,000,000 rounds of ammunition for the same.

No argument seems necessary to accentuate the fact that the efficient performance of duty, not only of the corps acting singly, but also in case of combined operations, requires that not only shall the corps be armed with the latest rifles, but that the arms used by all the forces should be the same. To sum up the situation, the men of the Marine Corps are armed and drilled with two models of rifles which differ in all respects, even in the kind of ammunition used. This condition needs no further comment.

The undersigned respectfully requests that authority be granted the Major-General Commandant to lay the above facts before the Naval Committee of the House during the next session of the Congress.

NEW LONDON, CONN.

The buildings at the naval station, New London, Conn., which were turned over to the Marine Corps by the Navy, having been extensively improved during the past year, the Advanced Base School, United States Marine Corps, was established there on July

13, 1910. The course at this school will embrace both practical and theoretical instruction in advanced base work, the erection of temporary fortifications, laying of mines, etc., and it is hoped that excellent results will be obtained.

The marine detachment stationed at this place consists of 10 officers and 50 enlisted men at present, but it is the intention of this office, from time to time, as officers and men are available, to augment the strength of the command materially.

MARINE OFFICERS' SCHOOL, PORT ROYAL, S. C.

The Marine Officers' School at Port Royal is progressing favorably, the locality having been found to be very desirable and the old buildings at the station, to which extensive repairs and improvements were made by the corps, have been used to advantage in carrying out the details of the school, but it is absolutely necessary that extensive repairs be made to these buildings if the post is to be continued for an extended period.

On December 22, 1909, 27 of the recently appointed second lieutenants of the corps were graduated from the school, and a class of 24, which is now undergoing instruction, will be graduated about December 20 of the present year. The course of instruction at the school has been very thorough, and the results achieved, particularly with the class now under instruction, have been extremely satisfactory and gratifying to the undersigned.

It is now desired to retain this station, in order to send there detachments for ships preparatory to sea service for a period of two months' instruction prior to going on board. This station is excellently equipped for this purpose.

GUANTANAMO, CUBA.

Conditions at this station have been somewhat improved by reason of the fact that the army has turned over to the Marine Corps its storehouses and all property, exclusive of certain engineer property, on Fishermans Point. An incinerator has been installed, and the old temporary frame buildings have been screened, and the command is now fairly comfortably quartered.

PANAMA.

The conditions surrounding the marine battalion stationed on the Isthmus of Panama are practically the same as at the date of the last annual report of this office. The battalion at present consists of 15 officers and 440 enlisted men, and will in all probability be relieved by another battalion in December of this year. Reports received show that the health of the command has been excellent during the past year.

The site occupied by the marine camp at Bas Obispo will soon become an island, as on the completion of the Gatun Dam the adjacent territory will be flooded and become unfit for use as a camp site. The buildings now used by the marines at Bas Obispo were all built by the French many years ago, and no appropriation has ever been allowed for the purpose of erecting new quarters or improving the

old ones, and although the President, while Secretary of War, strenuously recommended that proper quarters be built, nothing has ever been done toward such improvement.

NICARAGUAN EXPEDITIONARY FORCE.

An expeditionary regiment consisting of 32 officers and 709 enlisted men, under command of Col. James E. Mahoney, U. S. Marine Corps, sailed on the U. S. S. *Prairie* from Philadelphia, Pa., December 2, 1909, for Nicaragua. The regiment was transferred from the *Prairie* to the U. S. S. *Dixie* on December 5, 1909, sailing from a point on the Delaware River below Philadelphia for Cristobal, Canal Zone, on the same day, and arrived at the latter point December 12. The regiment was disembarked at Cristobal on December 12 and re-embarked the same day on the U. S. S. *Buffalo*, and proceeded to Corinto, Nicaragua, arriving at that place December 20, 1909, where it remained until March 15, 1910. The regiment returned to Balboa, Canal Zone, on the *Buffalo*, March 23, 1910, where it was disembarked and went into camp at Las Cascadas, Canal Zone, remaining there until April 14, 1910, when it was embarked on the *Prairie* and left for the United States on April 15, arriving at the navy-yard, Philadelphia, Pa., on April 25.

On December 11, 1909, Col. William P. Biddle, U. S. Marine Corps, was directed to take command of the first and second regiments, which were organized into an expeditionary brigade. The second regiment, consisting of 30 officers and 712 enlisted men, was commanded by Lieut. Col. Eli K. Cole, U. S. Marine Corps, and sailed from Philadelphia, Pa., on the U. S. S. *Prairie* December 14, 1909, arriving on the Canal Zone December 24, where it was disembarked and took station at Camp Elliott, Canal Zone, the same date, remaining at that place until April 14, 1910, when, with the exception of 3 officers and 200 enlisted men, it embarked on the U. S. S. *Prairie* and sailed for the United States, arriving at the navy-yard, Philadelphia, on April 25. Three officers and 200 enlisted men embarked on the U. S. S. *Buffalo* on April 13, 1910, and sailed for the navy-yard, Mare Island, Cal., where they were disembarked on May 5, 1910.

A battalion of the First Expeditionary Regiment remained at Camp Elliott, Canal Zone, relieving the detachment regularly stationed at that post. The battalion relieved (7 officers and 383 enlisted men) returned to the United States on the *Prairie*, arriving at the navy-yard, Philadelphia, Pa., on March 30, 1910.

From reports received from the commanding officer of the Nicaraguan expeditionary force it appears that the health of the entire command was excellent during its stay in the Tropics, and the commandant of the Nicaraguan Expeditionary Squadron (Rear-Admiral W. W. Kimball, U. S. Navy) under date of March 15, 1910, sent the following letter to the commanding officer of the First Expeditionary Regiment:

U. S. S. ALBANY, FLAGSHIP,
Corinto, Nicaragua, March 15, 1910.

SIR: You will please convey to the officers and men of the First Regiment of Marines, Expeditionary Brigade, the high appreciation of the commander of the Nicaraguan Expeditionary Squadron of the manner in which you and

the officers and men under your command have met the effects, usually so destructive to discipline and efficiency, of a long stay in a transport in the Tropics, accompanied by a succession of disappointments of hopes for service in the field.

Under such conditions, the facts that the fine morale of the regiment has been maintained and that fitness, efficiency, and resourcefulness have steadily increased should give you a feeling of proper pride in duty done to you and your command.

Under date of May 27, 1910, in accordance with cable orders from this office, Maj. Smedley D. Butler, U. S. Marine Corps, with a battalion consisting of 6 officers and 200 enlisted men from Camp Elliott, Isthmian Canal Zone, embarked on the U. S. S. *Dubuque* at Colon, Panama, on May 29, 1910, and proceeded to Bluefields, Nicaragua. This battalion remained at Bluefields guarding American interests at that place until September 4, 1910, when it returned to Colon on the U. S. S. *Tacoma* and resumed its proper station at Camp Elliott. Reports received here show that the health of the command was excellent during its stay at Bluefields, there being practically no sickness in the command.

HONOLULU.

At the present time the marine command at Honolulu, consisting of 10 officers and 391 enlisted men, is quartered in tents, there being no permanent quarters available. In the act approved March 31, 1909, Congress appropriated \$50,000 and \$135,000 for the erection of officers' quarters and barracks, respectively, at Pearl Harbor, Hawaii, and bids for this construction work will be opened at an early date.

BRIGADE IN PHILIPPINES.

During the past year the brigade in the Philippines has been maintained, as far as it has been possible so to do, up to the strength directed by the department. At such times as men have been available they have been sent out to replace those whose tours of duty had expired, but at no time during the year were there as many men in the Philippines as should have been in accordance with the department's instructions and as are really necessary to properly perform the duty assigned them. At the present time the strength of the brigade is 38 officers and 1,020 enlisted men.

The sum of \$60,000 should be allowed for building barracks outside of San Felipe at Cavite, P. I. The men are now living in buildings which were hastily constructed in 1899. These buildings are shut off from proper ventilation and are unhealthy and insanitary, all of which could be remedied for the sum of \$60,000.

Reports received from the brigade since the date of the last annual report are, in all respects, of a satisfactory nature.

GUAM.

The marine command in Guam consists of 5 officers and 100 enlisted men, and from reports received at these headquarters it appears that the health of the command has been excellent during the past year.

PEKING, CHINA.

The legation guard at Peking is being maintained at the same strength and under the same conditions as in the past. Reports received show that the condition of affairs in this command is most satisfactory.

TARGET PRACTICE AND RANGES.

The need of additional target ranges for the target practice of the posts of the Marine Corps, referred to in previous annual reports, has not been remedied to any appreciable extent, although the marine corps rifle range at Winthrop, Md., has been established during the past year. This range has been used since about May 15 last for the practice of the officers and enlisted men from the barracks at Philadelphia, Pa.; Annapolis, Md.; the garrisons at the two posts of the corps in Washington, D. C.; Norfolk, Va.; and Charleston, S. C. Camps of instruction were established at Wakefield, Mass., and, through courtesy of the army, at Fort Barry, Cal. The former camp accommodated officers and enlisted men from the barracks at Newport, R. I.; New York, N. Y.; Portsmouth, N. H.; and Boston, Mass.; also from the naval prisons at the two last-mentioned posts, from the U. S. S. *Wabash*, U. S. S. *Southery*, and such ships of the United States Atlantic Fleet as could send men of the marine detachments to that camp for practice. The range at Fort Barry affords practice for the garrisons at Mare Island, Cal., and the naval training station, San Francisco, Cal. The work accomplished at these camps will be referred to later in this report. While the results obtained have fully justified the expenditure for rentals and transportation, this plan is but a makeshift, and the acquiring of ranges for the exclusive use of the Marine Corps, especially in the vicinity of Mare Island, Cal., and New York, N. Y., or Boston, Mass., is strongly recommended. The sum of \$2,000 is available for the purpose of purchasing a site for a range, and steps are now being taken to secure same.

The following tables show the results of the work at the various camps of instruction during the year:

Winthrop, Md.

Expert riflemen.....	29
Sharpshooters	91
Marksmen	22
Unqualified	154
Number who fired.....	296

Wakefield, Mass.

Expert riflemen.....	38
Sharpshooters	103
Marksmen	53
Unqualified	393
Number who fired and failed to requalify or attain a higher grade.....	49
Number who fired.....	636

Fort Barry, Cal.

Expert riflemen.....	7
Sharpshooters.....	34
Marksmen.....	24
Unqualified.....	90
Number who fired.....	155

Fired preliminary course, 112.

The range at Mare Island, Cal., only allows of qualification in the marksman's course, and, in addition, is constantly in use by the receiving ship and other ships that may be at the yard. It is obvious, therefore, that the purchase of a range in the vicinity of Mare Island, also one on the North Atlantic coast, is an urgent necessity. The recommendation contained in the annual report of this office for 1909, to the effect that the Navy Department be conferred with, looking to the establishing of a joint range on the Pacific coast for the use of the officers and enlisted men of the Marine Corps and Navy stationed on that coast, both ashore and afloat, is again made.

The following table shows the comparative results of target practice on the range for the years 1908, 1909, and 1910 (to date):

	1908.	1909.	1910 (to date).
Expert riflemen.....	77	268	98
Sharpshooters.....	207	495	409
Marksmen.....	285	352	358
Total.....	569	1,115	865

The following table shows the approximate number of officers and enlisted men now graded as expert riflemen, sharpshooters, and marksmen; also the approximate number of enlisted men now drawing pay by reason of qualifications under the Small Arms Firing Regulations:

	Expert riflemen.	Sharp- shooters.	Marks- men.	Total.
Qualified in 1908.....	77	207	285	569
Qualified in 1909.....	268	495	352	1,115
Qualified in 1910 (to date).....	98	409	358	865
Officers and men now graded.....	443	1,111	1,025	2,579
Deducting officers.....	64	52	10	126
Qualifications from army.....	379	1,059	1,015	2,453
Deducting men discharged who probably will not reenlist.....	7	11	4	22
Approximate number of enlisted men who draw increased compensation for qualifications.....	386	1,070	1,019	2,475
	25	60	50	135
Approximate number of enlisted men who draw increased compensation for qualifications.....	361	1,010	909	2,340

The policy of distributing members of the marine corps rifle team among the various posts to act as instructors in rifle practice was continued during the past season, and resulted in a stimulation of interest in target practice. Every post in the United States will be furnished at the end of this season with capable instructors, and the

winter's work in the galleries will be made systematic throughout the corps. It is believed that good results will follow this procedure.

The evidencing of qualification by orders instead of by individual certificates, as formerly, has worked well, reducing largely the work in the office of the inspector of target practice and stimulating interest and pride in marksmanship by its publicity.

It is very gratifying for the undersigned to state that about 30 per cent of the enlisted men of the Marine Corps are drawing increased compensation on account of qualification at target practice.

RIFLE TEAM.

The marine corps rifle team was selected this year at the marine corps rifle range, Winthrop, Md., and the preliminary work was done at that range. Capt. William C. Harlee, U. S. Marine Corps, was the team captain. As a result of the training at Seagirt, N. J., in 1909, the selection of the team was not delayed this year, and the members had several months' practice together before leaving for Camp Perry, Ohio. The team left Winthrop on July 1 and returned to that place on July 26, after the completion of the matches at Camp Perry.

The Marine Corps entered individuals and teams in the following matches, with the results indicated:

Ohio State Rifle Association matches.

- Hale match (individual), 5 and 7.
- Peter's trophy (individual), 3.
- Buckeye match (individual), 2, 4, and 6.
- Du Pont individual tyro match, 2, 4, and 9.
- Catrow cup match (individual), 5.
- Governor's match (individual), 2, 3, 4, and 5.
- Adjutant-general's match (individual), 6 and 9.
- Herrick trophy (team):
 - Marine Corps team No. 2, 2.
 - Marine Corps team No. 1, 4.
- National team match, 42.

National Rifle Association matches.

- President's match, 1 and 3.
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Attention is invited to the excellent work done by Sergt. William A. Fragner and Corpl. George W. Farnham, U. S. Marine Corps, the former of whom won the President's match with a total score of 283 out of a possible 300, and the latter taking third place with a total score of 281. Corporal Farnham's score in the national individual match was 266, which, with the score of 281 made by him in the President's match, a total of 547, entitled him to the individual military rifle shooting championship of the United States. Sergeant Fragner's score in these two matches was 544. Considering the large number of competitors in these matches, representing the military and naval services and nearly every State and Territory, and the keen rivalry manifested throughout the same, the showing of Sergeant

Fragner and Corporal Farnham was especially creditable, and is a source of gratification to every officer and enlisted man in the Marine Corps.

In the national team match the Marine Corps team finished No. 42, with a score of 2,104. Its skirmish run, 1,032, the highest of any of its competitors, except the team representing the State of Iowa, with which it was tied, was not allowed, one of the alternates of the team committing a breach of decorum on the range by shouting words of encouragement to a member of the team on the skirmish run. Had its skirmish score not been thrown out, the team would have taken second place, its score then being but 50 points below that of the infantry team, which took first place. The showing made by the team in the national team match was distinctly creditable, as, but for the regrettable circumstance above cited, the team would have attained a higher standing than ever before made by a Marine Corps team in this match.

The cavalry team appealed from the decision of the executive officer at Camp Perry in throwing out the skirmish score of the Marine Corps team, and it is understood that at a meeting of the National Board for the Promotion of Rifle Practice, held in Washington, D. C., on September 26, 1910, it was decided that the appeal of the cavalry team should be allowed and the Marine Corps team be awarded second place in the national team match. The generous action of the cavalry team, as evidenced by the appeal of First Lieut. William H. Clopton, jr., U. S. Army, the team captain, is highly appreciated by the undersigned and by every officer and enlisted man of the Marine Corps.

The marking and scoring detachment furnished by the Marine Corps for duty during the national matches this year received favorable notice, as was the case last year, and their military bearing, appearance, and manner of performing their duties reflected great credit on their organization.

RECRUITING.

During the fiscal year ended June 30, 1910, recruiting was not as successful as during the preceding year, in view of the fact that in that year there were enlisted 4,115 men, a monthly average of 343, whereas during the current fiscal year 3,599 men were enlisted, a monthly average of but 300. This decrease is believed to be due, in a great measure, to the same reason that prevailed during the preceding year, i. e., increased business activity throughout the country. There are at the present time 14 recruiting districts and 90 stations, and it is believed that this number will be sufficient to fill up the corps.

This office fully appreciates the fact that the Bureau of Medicine and Surgery is unable to furnish naval examining surgeons for the Marine Corps recruiting stations, and on this account a great deal of trouble has been experienced, owing to the fact that civilian medical examiners on duty at the various stations do not render satisfactory service, due in a great measure to their inexperience and the further fact that the substations are, of necessity, being constantly changed, involving the employment of new and inexperienced medical examiners, and while these headquarters believe that these examiners are doing the best they can under existing circumstances, the percentage

of recruits rejected on second examination at posts is so great as to materially retard the results which should be expected, having in view the number of recruiting stations now in operation.

ESTABLISHMENT OF INSPECTION DISTRICTS.

The office of the assistant adjutant and inspector, north Atlantic inspection district, United States Marine Corps, was established on January 24, 1910, at 1100 South Broad street, Philadelphia, Pa., and on the 31st idem the office of the assistant adjutant and inspector, south Atlantic inspection district, United States Marine Corps, was established in the Dickson Building, Norfolk, Va. On February 1, 1910, the designation of the office of the assistant adjutant and inspector, San Francisco, Cal., was changed to the assistant adjutant and inspector, Pacific inspection district, United States Marine Corps, and that of the brigade adjutant and inspector, Philippine Islands, to the assistant adjutant and inspector, Philippines inspection district, United States Marine Corps.

MOVEMENT OF DETACHMENTS.

During the year movements of detachments were made as the necessities of the service required and as was able to be done with the force at hand. It has not been possible, owing to the scarcity of men, to make such movements as is believed would add to the greatest efficiency of the service.

SALARIES OF CIVILIAN EMPLOYEES.

The undersigned respectfully renews the recommendation made in the annual reports for the years 1897, 1898, 1899, 1900, and 1909, respectively, and in various special communications (the last dated September 1, 1909), that the classified civilian employees of his office and of the several staff offices of the Marine Corps be placed on a footing more nearly equal, as regards pay, to that of like employees of other governmental offices and bureaus, particularly those of the Navy Department.

Attention is invited to the fact that, barring the increase of three of them from \$1,540.80 to \$1,600 in 1904, the salaries (\$1,600) of the chief clerks of the four offices at these headquarters are precisely the same as they were many years ago, when the amount of work and the responsibilities devolving upon said chief clerks were probably less

than one-quarter of what they are now with the greatly increased strength of the corps and the corresponding increase of business. The latter figure, it may be noted, is not the one now allowed chief clerks in nearly all cases, but is the salary which was fixed by Congress in 1853, not specifically for chief clerks, but for clerical employees of class 3. As early as 1863 six of the eight chief clerks in the department were allowed \$1,800, and in 1899 the salaries of all said chief clerks were increased to \$2,000 per annum. Many chief clerks in other departments receive salaries greatly in excess of those in effect at these headquarters, chief clerks receiving less than \$2,000 per annum being extremely rare. Many of them are allowed much more. In fact, hundreds of subordinate clerks employed elsewhere receive \$200 per annum more than the chief clerks at these headquarters.

The present incumbents of the four chief clerkships here have been in the service from eleven to twenty-one years.

GOOD-CONDUCT MEDALS.

During the past year 379 good-conduct medals and 146 good-conduct medal bars have been issued to enlisted men of the corps. Having in view the conditions under which these medals and bars are awarded, the above record shows a very satisfactory standard as to the men who reenlist in the corps.

CAMPAIGN BADGES.

Since the date of the last annual report from these headquarters the following campaign badges and bars have been issued in accordance with the provisions of Navy Department Special Order No. 82, dated June 27, 1909, to officers and enlisted men of the Marine Corps, to commemorate services rendered in campaigns: Twenty-five civil war campaign badges and bars, 134 Spanish-American campaign badges and bars, 162 China campaign badges and bars, 297 Philippine campaign badges and bars.

NAVY MAIL CLERKS.

In previous annual reports of this office the attention of the department was invited to the fact that by the act approved May 27, 1908, enlisted men of the Marine Corps were debarred from being

selected and designated as "navy mail clerks" and "assistant navy mail clerks." It is not believed that it was the intention of the framers of the law to deprive enlisted men of the Marine Corps of these appointments, especially in view of the fact that for many years prior to the passage of this act the mail on board ships of the navy has been handled by enlisted men of the corps without increased compensation. It therefore does not seem proper that now, since there is a pecuniary benefit attached thereto, the enlisted men of the corps should be deprived of such benefits. It is again, therefore, earnestly recommended that the legislation above referred to be amended so as to make it applicable to enlisted men of the Marine Corps.

INSTRUCTION OF COOKS.

The ration is continually being improved, both as to the component parts and the quality thereof. It is a well-known fact, however, that the best of food, if improperly handled, will produce worse results than poor food well handled. In other words, it is becoming more and more necessary, with the changed condition of affairs, that there should be systematic instruction of cooks for the corps, and the undersigned therefore again renews the recommendation made in previous reports that the necessary legislation be secured to establish a school of instruction for cooks, with a view to the more economical and better preparation of the ration.

FINGER-PRINT IDENTIFICATION SYSTEM.

There are now in the files of the finger-print identification system of the corps, which was adopted July 1, 1907, about 18,000 records. Of these, 14,000, approximately, are records of recruits, the balance being those of men in service at the date when the system was adopted. Two hundred and thirty-three detections as to fraudulent enlistment have been made by this system, this being about 1 detection to each 60 recruits enlisted, and shows the advantage of the system. The undersigned feels, however, that so long as the different branches of the service work independently the best results will not follow, for it is only by the merest accident that the work of one office benefits any other office. A central clearing house will make every finger print taken available for the purpose of detecting fraudulent enlistments in all the services. The scheme of such a central clearing house is feasible, and this matter, which was previously commented upon, is again brought to the department's attention, with the recommendation that steps be taken to provide for such a central clearing house for finger-print cards.

TRANSPORTS FOR THE MARINE CORPS.

The undersigned reiterates the recommendation made by him in former annual reports that a ship of the *Dixie* or *Panther* type be converted into a transport for the sole and exclusive use of the Marine Corps, said ship to be commanded and manned by officers and enlisted men of the navy, but for use solely as a transport for the corps and for advanced base work. In the event that vessels of the

above-mentioned type are not available it is suggested that either the U. S. S. *Columbia* or *Minneapolis* would be suitable for the purpose indicated. The reasons which were previously urged are as potent now as then and seem to the undersigned to be sufficient to warrant the renewal of this, his recommendation, in the premises.

COMMENDATORY LETTERS AND LIFE-SAVING MEDALS.

The undersigned is gratified to report that during the past year commendatory letters have been sent to members of the Marine Corps for special services rendered, and that there have been filed at these headquarters letters of commendation bearing on the corps as a whole.

Silver life-saving medals were awarded by the Treasury Department to Privates William E. Lester and Peter Foy, U. S. Marine Corps, for courage and presence of mind displayed by them in rescuing certain persons from drowning in the navigable waters of the United States during the past year.

DEPOSITS.

The benefits of the present system of savings deposits have continued to be availed of throughout the fiscal year, and in general the spirit of thrift among the enlisted men has constantly increased.

EXAMINATION OF OFFICERS FOR PROMOTION.

The recommendation contained in previous annual reports of this office to the effect that the law pertaining to the examination of officers of the Marine Corps for promotion be amended so that the moral examination shall precede the physical examination is, for the reasons previously urged, again renewed.

CEREMONIES.

During the past year the corps has, as in the past, been requested frequently to participate in public ceremonies of every character, and wherever it has been practicable said requests have been complied with. In many cases invitations had to be declined owing to the impossibility of securing the necessary officers and men to participate.

ARMY COURTESIES.

The undersigned is again pleased to place upon record the courtesies extended to the corps by the officers of the War Department, which have been continued during the past year.

APPOINTMENTS AND PROMOTIONS.

The appointments and promotions in both the line and staff of the corps which were made during the past year are fully recorded in the files of the department, and no further reference thereto is deemed necessary.

ENLISTED FORCE.

The enlistments and reenlistments in the Marine Corps during the past year have been as follows:

Enlistments	3,939
Reenlistments:	
From Marine Corps.....	817.
From United States Army.....	122
Joined from desertion.....	150
	1,098
Total	5,037
Discharged, deserted, retired, and died.....	4,970
Net gain	67

DISTRIBUTION OF FORCE.

The following is the general distribution of the officers and enlisted men of the Marine Corps at the present time:

	Officers.	Enlisted men.
On shore duty within the territorial limits of the United States.....	197	4,470
On shore duty outside the territorial limits of the United States.....	82	2,357
On board ships in commission.....	55	2,440
Total.....	334	9,267

Number of officers allowed by law.....	334
Number of enlisted men allowed by law.....	9,521
In service September 27, 1910:	
Officers.....	334
Enlisted men	9,267

RETIREMENTS, RESIGNATIONS, DEATHS, ETC.

During the past year there were four retirements, one resignation, and two deaths among the officers of the Marine Corps.

In conclusion, the undersigned desires to state that the recommendations herein made, both as to the personnel and the matériel, have been very carefully considered; and he trusts that they will receive favorable consideration on the part of the department.

Very respectfully,

G. F. ELLIOTT,
Major-General, Commandant.

The SECRETARY OF THE NAVY,
Navy Department, Washington, D. C.

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